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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Washington 25, D. C.

April 25, 1955

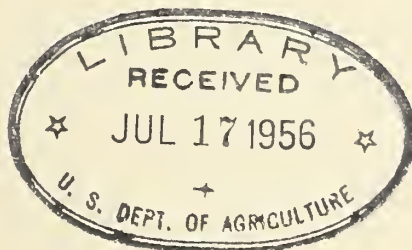
INTERIM WATERSHED PROTECTION HANDBOOK

The attached "Interim Watershed Protection Handbook" has the full force and effect of prescribed Soil Conservation Service policies and procedures for carrying out the provisions of the Watershed Protection and Flood Prevention Act (Public Law 566, 83d Congress, 68 Stat. 666). It is the intention of the Service to prepare a final edition of this Handbook in the fall of 1955, after its provisions have been tested by field operation.

It is not contemplated that any major changes will be made that would affect working relations with local organizations or other agencies. It is recognized, however, that minor details will need to be clarified, additional subject matter may need to be included, and some duplication may need to be eliminated.

D. A. Williams
D. A. Williams
Administrator

Attachment



UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Washington 25, D. C.

September 6, 1955

INTERIM WATERSHED PROTECTION HANDBOOK

NOTICE NO. 3

Attached is a revision of page 1, section 5, relative to land treatment measures associated with development of land necessary to take advantage of irrigation, drainage and restoration of productivity and change in flood plain land use and a revision of page 5, section 5, relative to ineligible measures on Federal and non-Federal land. Please substitute these revised pages for those now in section 5 of the Interim Watershed Protection Handbook.



Carl B. Brown
Director, Planning Division

STC - 20
EWP - 12
PT - 1
AC - 1
WD - 1

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Washington 25, D. C.

August 12, 1955

INTERIM WATERSHED PROTECTION HANDBOOK

NOTICE NO. 2

Attached is a revision of page 5 relative to the size and types of watersheds eligible under P. L. 566. Please replace page 5 of Section 2 with the attached revised page 5 dated (Revised 8/10/55. No changes were made on page 6.



Carl B. Brown
Director, Planning Division

STC - 20
EWP - 12
PT - 1
AC - 1
WD - 1

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Washington 25, D. C.

June 17, 1955

INTERIM WATERSHED PROTECTION HANDBOOK

NOTICE NO. 1

Under date of April 25, 1955, the Administrator released the "Interim Watershed Protection Handbook." At that time not all sections had been prepared. Subsequently, several additional sections were prepared, duplicated, and distributed.

Up to date the following sections have been previously distributed: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 21, 23, 26, 27, 28, 29, and 30.

Attached to this notice are the following sections: 13, 15, 19, 22, and pages 11 and 12 of section 30.

Section 24 has been cancelled, as the subject material has been included in section 13.

The one remaining section, 25, comprising an index of terms, will be completed at a later date.



Carl B. Brown
Director, Planning Division

STC - 20
EWP - 12
PT - 1
AC - 1
WD - 1

INTERIM WATERSHED PROTECTION HANDBOOK

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 Agricultural Research Service, Geological Survey, Fish
 and Wildlife Service, and Weather Bureau

SOIL CONSERVATION SERVICE
POLICY AND PROCEDURES FOR CARRYING OUT THE PROVISIONS
OF THE WATERSHED PROTECTION AND FLOOD PREVENTION ACT
(PUBLIC LAW 566 - 83d CONGRESS - 68 STAT. 666)
(Working draft for Administrative Review Purposes Only)

SECTION 1

PROGRAM OBJECTIVES AND REQUIREMENTS

The Watershed Protection and Flood Prevention Act authorizes the Secretary of Agriculture to cooperate with local organizations, (including the States or any political subdivision thereof having authority under State law to carry out, maintain, and operate works of improvement) in planning and carrying out works of improvement for flood prevention or for the agricultural phases of the conservation, development, utilization, and disposal of water in watershed or subwatershed areas.

The Act provides additional authority to the Secretary of Agriculture to assist local organizations in carrying out a sound program for the development, use, and conservation of the Nation's soil and water resources. It provides for technical and financial assistance by the Department to landowners and operators and other people living in small watersheds. It provides also for needed additional treatment and protection of Federally-owned lands within such watersheds. Moreover, it provides a basis for coordinating such locally undertaken upstream watershed improvements with water-resource development projects on major rivers of the Nation.

The Act provides for a new kind of project-type approach to soil and water resource development, use, and conservation. Unlike older project-type Federal public works programs in this field it requires that full initiative and maximum responsibility for any undertaking be exercised by local people through their local organizations. It encourages the close cooperation and assistance of State agencies. The provisions of the Act emphasize the partnership of local, State and Federal interests in natural resource development, use, and conservation.

It is unlike other national conservation programs for its project-type approach requires the development of a physically and economically sound plan of improvements scheduled for execution over a definite period of years. Firm commitments are required from local organizations or the States for sharing the costs of installation and assuming the operation and maintenance (with certain exceptions on Federal land) and for meeting other requirements as a condition for Federal financial assistance in carrying out the improvements.

The Congress has made it clear that the additional authority provided under the Act should be used to "supplement both our present agricultural soil and water conservation programs and our programs for development and flood protection of major river valleys. It will bridge the gap between these two types of programs and greatly enhance the ultimate benefits of both." (House of Representatives Report No. 1140, 83d Cong., 2d Sess.)

"Federal help under the act is available only to assist local organizations to plan and install needed water-management and flood-prevention measures that cannot feasibly be installed under other current Federal conservation programs." (Committee Print, H.R. Committee on Agriculture, August 25, 1954, 83d Cong., 2d Sess. Watershed Conservation and Flood Prevention, Answer to Question 4.)

Summary of Requirements

The following lists of requirements summarize all pertinent provisions of law, regulations, and policies applicable specifically to carrying out a program under provisions of the Watershed Protection and Flood Prevention Act. These requirements are taken from (1) the Act itself, (handbook sec. 26); (2) the President's rules and regulations, Executive Order 10584 (handbook sec. 27); (3) the policy of the Secretary of Agriculture (handbook sec. 28); (4) USDA Regulations, Title 9 (handbook sec. 29); and (5) Budget Bureau Circular A-47.

Other general Federal and State laws and regulations are applicable to this program and other related programs. Provisions of these laws and regulations as contained in USDA Administrative Regulations and agency handbooks are not repeated here except where some interpretation of their applicability is necessary.

Two references are given after most items in the following list. The first refers to the specific provision of law, policy, or regulation. The second refers to further explanation and interpretation of the requirement in the appropriate handbook section.

Requirements applying to local organization(s)

Local organization(s) must:

1. Be qualified to apply for assistance (sec. 2; sec. 3).
2. Submit the application to an authorized State agency or the Governor (sec. 3; sec. 3).
3. Agree on the plan for works of improvements (sec. 5; sec. 4).
4. Provide for assuming an equitable share of the cost of improvements (sec. 4; sec. 7).
5. Construct or contract for the construction of all works of improvement on privately-owned lands, if authorized to do so, and in any event after July 1, 1956 (sec. 5; sec. 13).
6. Obtain required agreements to carry out "recommended soil conservation measures and proper farm plans" (sec. 4(5); sec. 2).
7. Provide documentary evidence of acquisition of necessary land, easements, and rights-of-way (sec. 4(1); sec. 15).

8. Acquire or provide evidence that landowners have acquired necessary water rights in accordance with applicable State laws (sec. 4(4); sec. 14).
9. Provide assurance that structural works of improvement will be installed, operated, and maintained in accordance with applicable State laws (Secy. policy; sec. 14).
10. Provide documentary evidence of adequate arrangements to operate and maintain improvements (sec. 4(3); sec. 19).
11. Inform landowners and others participating in planning and carrying out the works of improvement of their responsibilities for compliance with applicable State and Federal laws (Secy. policy; sec. 3).

Requirements applying to the States

The States, through an authorized State agency or the Governor, will have the responsibility or opportunity to:

1. Review and approve, disapprove, or not disapprove within 45 days, applications from local organizations (sec. 3; sec. 3).
2. Recommend priorities of watersheds for assistance within the State (Service policy; sec. 3).
3. Review and comment on plans for works of improvement (Exec. Order 10584; sec. 4).
4. Participate in planning and financing improvements (Secy. policy; sec. 17).

Requirements applying to Federal agencies assisting local organization(s)

- A. The Soil Conservation Service, exercising the responsibilities delegated by the Secretary of Agriculture, with the assistance of the Forest Service as provided for in Title 9, USDA Regulations, under such criteria, standards, objectives, and procedures as are provided for in this handbook, will:
 1. Approve or disapprove applications for Federal assistance in preparing plans for works of improvement and assign priorities for such assistance, taking into account recommendations of the State for priority within the State (Exec. Order 10584 and Secy. policy; sec. 2; sec. 3).
 2. Conduct necessary surveys and investigations (sec. 3(1); sec. 4).
 3. In cooperation with local organization(s) and Federal land administering agencies, prepare plans for works of improvement to cover, where possible, all lands within a watershed regardless of ownership (sec. 3(1); sec. 4).

4. Determine the physical and economic soundness of plans including the relation between the benefits and costs that can be evaluated in monetary terms (sec. 3(2); sec. 6).
 5. Cooperate and enter into agreements with local organization(s) (including the States) to furnish financial and other assistance (sec. 3(3); sec. 10; sec. 24).
 6. Assist local organization(s) in developing designs, specifications, and in preparing contracts for installing works of improvement (sec. 5; sec. 13).
 7. Participate in the installation of works of improvement (except that authority for constructing or entering into any contract for the construction of any structure, where no local organization(s) has requisite authority, will expire July 1, 1956) (sec. 5, proviso; sec. 10; sec. 13).
 8. Secure the cooperation of other Federal agencies in carrying out the plan for works of improvement (sec. 3(4); sec. 11; sec. 18).
 9. Cooperate with other Federal agencies, States, and local agencies in making investigations and surveys of the watersheds of rivers and other waterways as needed for program coordination (sec. 6; sec. 8).
 10. Hold public hearings when such action will further the purposes of the Act (Exec. Order 10584).
- B. The Forest Service and other land-managing agencies of the Federal Government will on Federal lands under their administration:
1. Have responsibility for determination of watershed conditions, works of improvement needed, and manner of installing, operating, and maintaining and evaluating all works of improvement (sec. 5; Exec. Order 10584; sec. 11).
 2. Require a sharing by non-Federal interests in the cost allocable to non-Federal land for the installation, operation, and maintenance of works of improvement other than land-treatment measures (Secy. policy; sec. 7).
 3. Install land-treatment measures on Federal lands only to the extent necessary to complete the application of such needed measures provided for in approved work plans during the scheduled period for completion of the project (Secy. policy; sec. 11).
- C. As a condition to providing assistance in developing a plan for works of improvement, and to submit a plan providing for Federal financial assistance, the Soil Conservation Service and cooperating Federal agencies must observe the following:

1. The plan can include only those structural measures producing direct measurable benefits in (1) flood prevention, or (2) the agricultural phases of the conservation, development, utilization, and disposal of water (sec. 2; sec. 2).
2. The plan must cover a watershed or subwatershed area of not more than 250,000 acres, except that where local sponsoring organization(s) so desire, a number of such watersheds, when they are component parts of a larger watershed, may be planned together. However, no single plan will be submitted for a watershed or subwatershed area exceeding 250,000 acres.(sec. 2; sec. 2).
3. No structure containing more than 5,000 acre-feet of total capacity may be included in the plan (sec. 2; sec. 2).
4. Any plan which contains a structure providing more than 2,500 acre-feet of total capacity must be approved by the Committee on Agriculture ~~and~~ Forestry of the Senate and the Committee on Agriculture of the House of Representatives (sec. 2; sec. 2).
5. No part of the construction cost may be provided from appropriations made under authority of the Act for any capacity provided in structures for purposes other than flood prevention and features related thereto (sec. 4(2); sec. 2).
6. Federal assistance for land-treatment measures may not exceed the rate of assistance for similar practices under existing national programs (sec. 3(3)). Department policy provides that only technical assistance will be furnished for installation of land-treatment measures on lands not in Federal ownership from appropriations made under authority of the Act (Secy. policy; sec. 7).
7. The authority provided under the Act will be used in lieu of any other legislative authorities available to the Department to furnish assistance for planning and carrying out watershed projects in which cost-sharing under the authority of the Act is proposed (sec. 5; sec. 2). (Watershed planning assistance may be provided under other authorities, such as Public Law 46, if land owners and operators or local organizations do not request Federal cost-sharing in installation of works of improvement from appropriations made for watershed-protection or flood-prevention programs).
8. The works of improvement proposed in the plan must constitute needed and harmonious elements in the comprehensive development of the river subbasin or river basin involved (Exec. Order 10584; sec. 7).

9. Recognition must be given to all downstream works of improvement in place and in operation, or soon to be brought into operation with a view to (1) properly reflecting the respective contributions of upstream and downstream improvements, (2) providing the best use and control of water resources at minimum cost, (3) giving preference to the alternative or combination of upstream and downstream improvements least costly to the Federal Government, and (4) eliminating duplication of benefits where they are produced jointly by an upstream and downstream system of improvements (Exec. Order 10584; sec. 8).
10. Determine that all planned improvements are to be carried out, operated, and maintained in accordance with applicable State laws (Secy. policy; sec. 14).
11. Sponsoring local organization(s), Governors, and concerned Federal agencies must be notified of approvals and disapprovals of applications for assistance. Governors and concerned Federal agencies must also be provided with appropriate information regarding the scope, nature, status, and results of such surveys or investigation, and furnished plans for review and comment prior to their transmission to the Congress through the President (Exec. Order 10584; sec. 3; sec. 4).
12. Conform with requirements for review and/or approval of applications for assistance and plans of improvements as set forth in appended flow chart (handbook sec. 22).
13. Arrangements must be made for assistance from principal basic-data collecting agencies in providing information needed in planning and carrying out works of improvement (Exec. Order 10584; sec. 2).

SECTION 2

CRITERIA FOR PROVIDING ASSISTANCE

In determining national priorities for providing assistance in planning and installation of improvements, and in consulting with State agencies on their recommendations for priority within the State, the Soil Conservation Service will be guided by the following:

1. Utilization of the authority of the Act

Significant watershed problems must exist which cannot be solved adequately or in a timely manner with assistance available under other Federal programs but which can be solved or alleviated by assistance authorized under the Act. Significant watershed problems are considered to be those which affect and require action for their solution by groups of landowners, communities, and the general public through cooperation of local, State, and Federal Governments. They are problems which would still exist in measurable degree after individual land owners and operators had achieved use of their land within its capability and treatment according to its need within the limits of private and public resources available to them. Significant watershed problems include, but are not limited to, those requiring installation of measures such as floodwater-retarding structures, levees, floodways, irrigation and drainage improvements; and those for stabilization of major gullies, stream-channel improvement, highway stabilization, ground-water recharge, eradication of useless water-consuming vegetation, fire protection, and revegetation of critical runoff and sediment-source areas.

Significant problems of this kind do not exist in all small watersheds. The need may be only for land treatment by such measures as standard terracing, crop rotation, pasture improvement, woodland management, etc., the principal benefits of which accrue to the land on which such treatments are applied.

Other Federal programs may provide adequately for educational, technical, financial and credit assistance to land owners and operators of private lands for making such improvements. Likewise, other Federal programs may provide adequately for needed treatment and protection of this type on Federally-owned lands. Therefore, the authority under the Act will be used to provide assistance in planning a watershed only where there are significant needs for works of improvement other than the kinds which individual landowners or even small groups of landowners could be expected to accomplish with the types of help available under other programs.

The Service will limit financial assistance on privately-owned lands to those measures which (a) are primarily for flood prevention, drainage, irrigation, or other agricultural water management, (b) produce substantial benefits to groups of landowners, to communities and to

the general public, and (c) cannot generally be installed by individual landowners or small groups of landowners with the aid of available ACP cost-sharing.

Where significant flood prevention, drainage, irrigation and other agricultural water management needs do exist, however, and a project for their solution is found to be justified, funds for additional technical assistance and for the acceleration of treatment of Federally-owned lands will be included in the plan only to the extent necessary to assure completion of both land treatment and other works of improvement within the agreed upon schedule for project completion.

The dominant problem in some small watersheds may require measures for its solution that are not authorized under the Act. For example, the problem may be water pollution by sewage or industrial wastes. The need may be for a dam having a detention or impounding capacity of more than 5,000 acre-feet. No assistance can be given under the authority of the Act in the solution of such problems, but the Soil Conservation Service may suggest other available sources of assistance in the solution of such problems.

2. Utilization of other related authorities

In carrying out its responsibilities under the Act, the Service will use and encourage other agencies to use, to the fullest possible extent, resources available from appropriations made under authority of other Federal legislation to further the development of watershed projects. This may include continuance and where essential increases in the following kinds of assistance within the watershed project area:

- (a) Educational assistance from the cooperative Federal-State Extension Service.
- (b) Technical assistance by the Soil Conservation Service under its national program of assistance to soil conservation districts.
- (c) ACP financial assistance.
- (d) FHA credit assistance under Public Law 597 - 83rd Congress.
- (e) Farm forestry assistance provided under the Cooperative Forest Management Act.
- (f) Protection of forest areas from fire, insects, and disease under cooperative programs authorized by the Clarke-McNary Act, Forest Pest Control Act, and White Pine Blister Rust Protection Act.
- (g) Protection and treatment of Federally-owned lands in the watershed by land-managing agencies.
- (h) Collection of basic data by research and basic-data collecting agencies in the Departments of Agriculture, Interior, and Commerce.

The Service will continue to emphasize the advantages of the watershed approach, where applicable, to soil and water conservation programs of soil conservation districts. Where districts so desire, and have provided for it in their plan of operations, the Service will continue to assist them in watershed planning under its national program of assistance to districts.

3. Required land treatment

The Service will emphasize proper land use and treatment as the most fundamental requirement of a successful watershed project. A high degree of application of needed land-treatment measures will be required prior to furnishing financial assistance in installation of structures.

The Act requires that local organizations shall "obtain agreements to carry out recommended soil conservation measures and proper farm plans from owners of not less than 50 per centum of the lands situated in the drainage area above each retention reservoir to be installed with Federal assistance" (sec. 4(5)).

"Proper farm plans," hereinafter referred to as conservation plans, shall mean basic farm and ranch conservation plans based on use of land within its capability according to Service standards of capability classification and treatment of land by measures designed to reduce soil and other agricultural resource losses to established Service standards for sustained use of these resources.

In providing assistance in the installation of structures after approval of a work plan, the above provisions of the Act and the following additional requirements will be observed:

- (a) The provisions of the above cited section of the Act shall apply to all retention (floodwater detention or retarding) reservoirs. It shall apply also to all other structural works of improvement for flood prevention (including land stabilization), irrigation, drainage, and other agricultural water management where the design, operation, maintenance, or effective utilization of the structural works would be impaired or made more costly by lack of proper land treatment.
- (b) Conservation plans must be agreed upon by land owners and operators of non-Federal land prior to providing financial assistance for installation of structural works of improvement on at least 75 percent of the land affected by any irrigation, drainage, or other agricultural water-management structural improvement.
- (c) Not less than 75 percent of all land treatment measures above structural works of improvement, the lack of which would adversely affect the design, operation, and maintenance of the structural works, must be installed or planned for concurrent installation prior to providing Federal assistance for the structural works. Concurrent installation shall mean that such land treatment not

already completed shall be installed or installation commenced (if more than one crop season is required) within the year in which the structural measures are installed.

- (d) Soil conservation measures to be included in conservation plans agreed to by land owners and operators shall include, but shall not be limited to:
 - (1) those measures that will have substantial effects in reducing runoff and sediment production, which, if not brought under control, would adversely affect the design, operation, or maintenance of a structure, and
 - (2) those measures on lands to be benefited by structural works for flood prevention, irrigation, drainage and other agricultural water management which will permit the efficient use of such lands.

Thus, measures such as terracing, cover crops, and stabilized farm waterways, needed above structures, and proper leveling, tile drainage, and irrigation practices needed below structures should be included in conservation plans. Other soil conservation measures which may have little or no effect on runoff and sediment production or on utilization of principal drainage and irrigation facilities may be included in conservation plans but their application prior to the installation of structural works is not required.

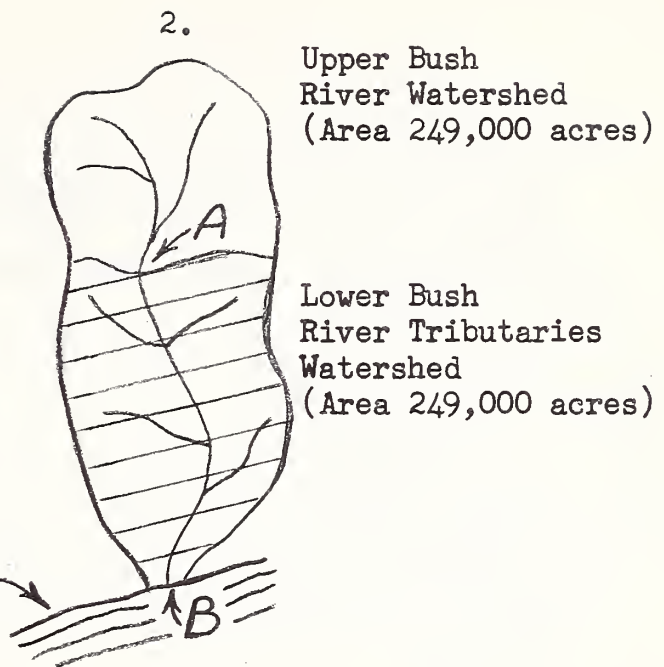
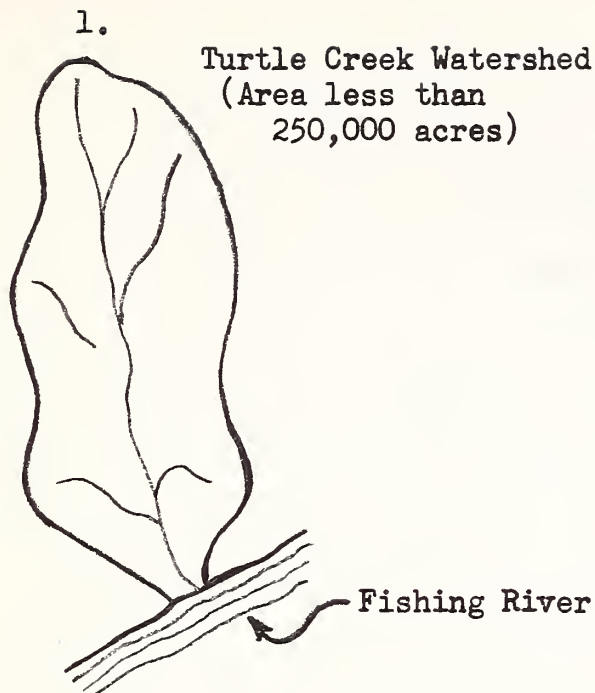
4. Size and types of watersheds

The Act provides that works of improvement must be planned and carried out "in watershed or subwatershed areas not exceeding two hundred and fifty thousand acres." However, a "number of such subwatersheds, when they are component parts of a larger watershed, may be planned together when the local sponsoring organizations so desire."

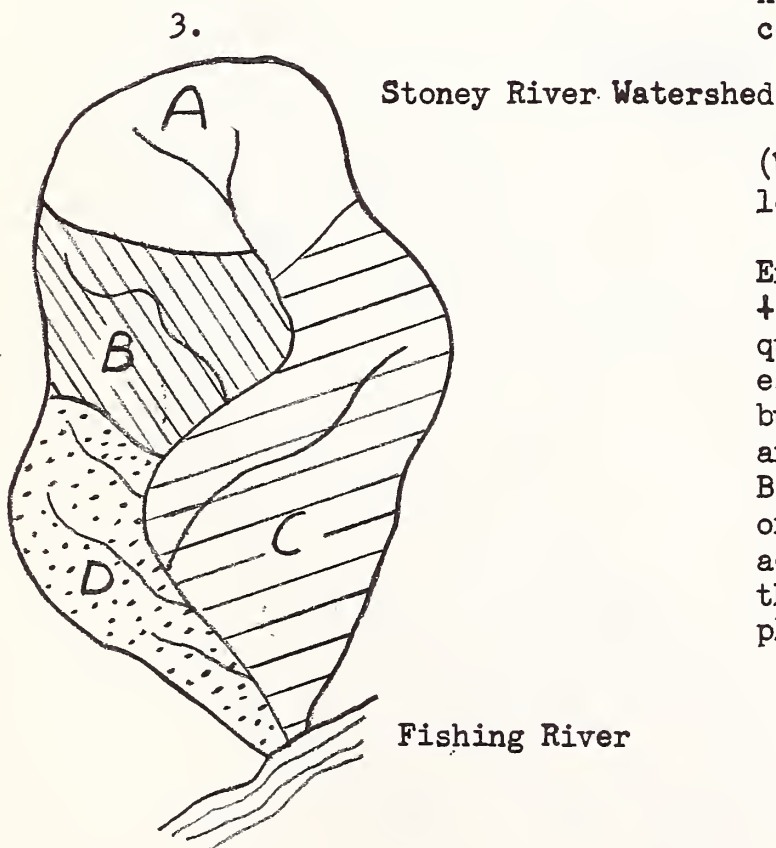
The Service will not submit single plans for works of improvement on areas exceeding 250,000 acres even though several areas, each less than this size, may be planned jointly at the request of local organizations.

A watershed area under the Act comprises all land and water within the confines of a drainage divide of an area of 250,000 acres or less. A watershed area may comprise the land and water of two or more minor drainageways, not tributaries to each other, but severally tributary to a stream, artificial waterway, lake, bay, or other tidal area. A watershed area may exclude areas from which water is brought into it by diversion if these sources of water have no significant effect on the flood-prevention and water-management problems of the watershed area. The watershed area must necessarily include, however, all directly tributary drainageways and lands from which water and sediment could reach and adversely affect any water-management facility such as an irrigation or drainage canal, floodway, or floodwater-retarding structure included in the plan.

Types of watersheds which are eligible for assistance under the Act are illustrated in the following diagrams:



Watershed areas above A and between A and B must both be less than 250,000 acres. Improvements may be made on the main watercourse provided the area above the location of said improvements has been planned or is being planned concurrently.

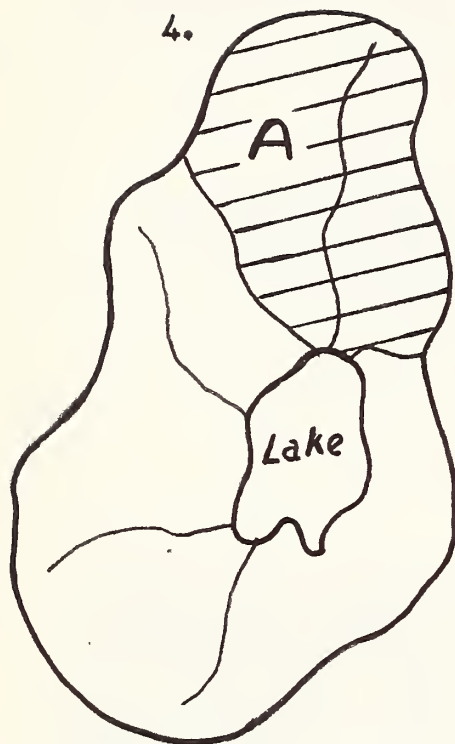


(Watershed areas A, B, C, and D are each less than 250,000 acres.)

Entire Stoney River watershed (A + B + C + D) may be planned together if so requested by local organization(s), and each watershed is authorized for planning, but separate applications and work plans are required on each watershed area (A, B, C, and D). Improvements may be made on Stoney River below a point of 250,000 acres of drainage provided the area above the location of said improvements has been planned or is being planned concurrently.

4.

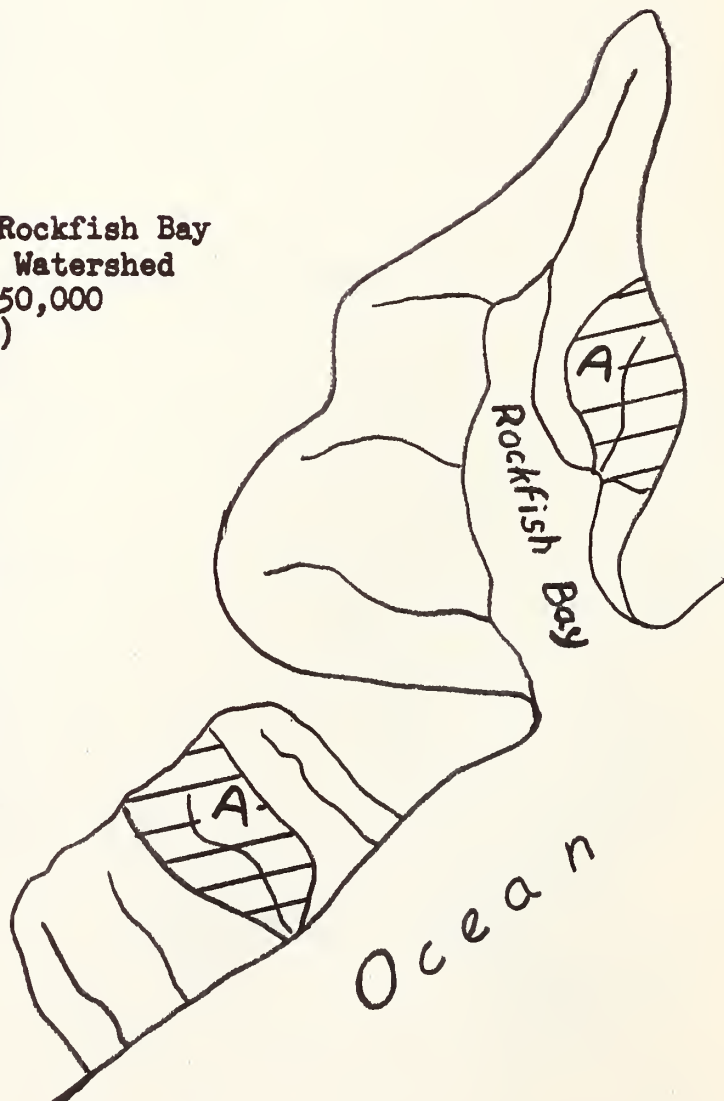
Little Salt Lake Watershed
(Less than 250,000 acres)

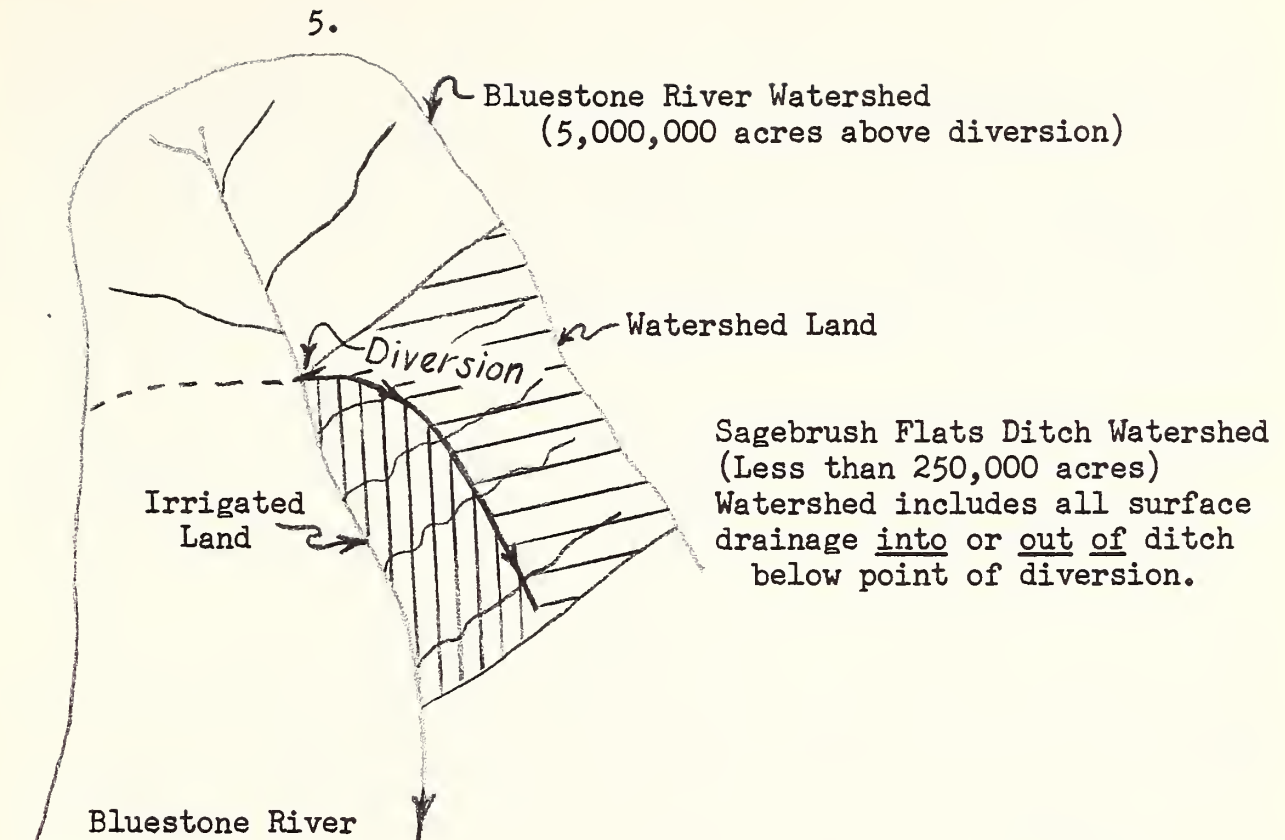


Rockfish Bay Watershed
(Less than 250,000 acres)

Planning assistance may be provided for the entire watershed or for separate tributaries such as A if so requested. If watershed area is larger than 250,000 acres, treat as in illustration 3.

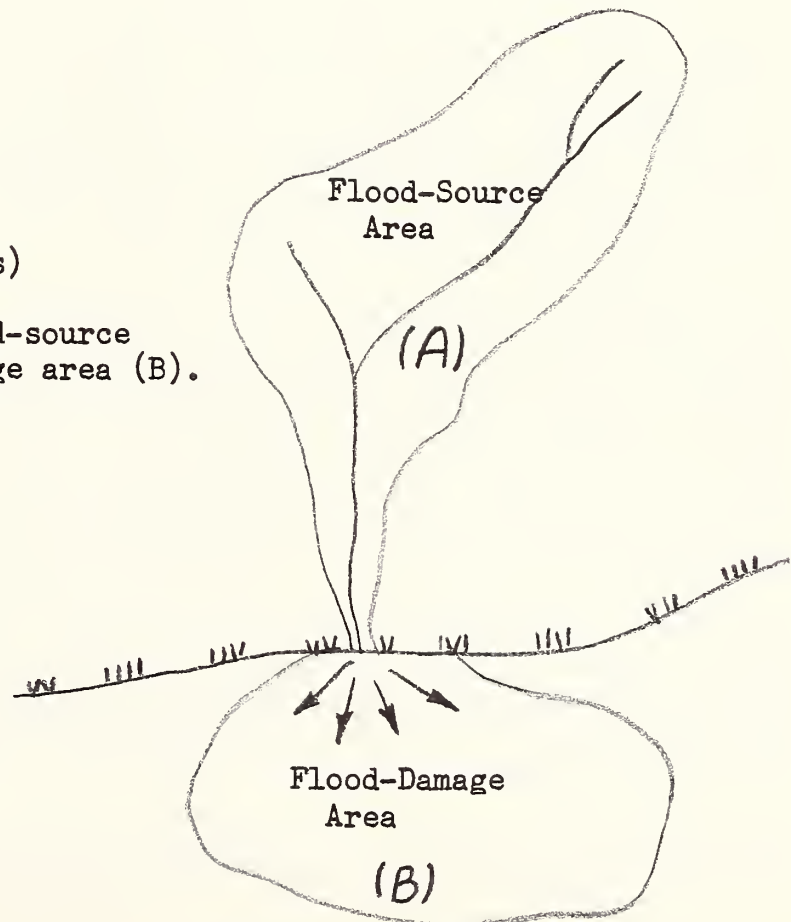
Sandy Beach Tributaries Watershed
(Less than 250,000 acres)





Dry Gulch Watershed
(Less than 250,000 acres)

Watershed includes flood-source
area (A) and flood-damage area (B).



Large Agricultural Valley

4. (continued)

While only maximum size limits are prescribed by the Act, it should be recognized that certain fixed costs are inherent in project planning, approval, and installation. As a result, both the "overhead" costs and costs for which cost-sharing is required are larger per unit area for smaller projects than for larger projects, other factors being equal. Difficulties are inherent in carrying out complex projects on large areas involving large total costs within a relatively few years. These problems include both local financing and the allocation of funds appropriated under authority of the Act in relatively large amounts to one geographical area or State.

Another significant factor is the relation of benefits to costs of works of improvement. Often it has been found that in very small watersheds the benefits within the watershed will not justify the costs of needed works of improvement.

5. Watershed projects should have multiple objectives

All watershed projects will have multiple objectives. They will provide for proper land use and treatment in the interest of soil and water conservation as well as objectives such as flood prevention and/or irrigation, drainage, or other phases of agricultural water management.

Whereas needed land-treatment measures, as defined in item 3 of this section, must be included in the work plan as a condition to Federal assistance, the objectives of the local organization shall be the controlling factor in planning for other works of improvement. For example, a given watershed may have problems both of flood prevention and of irrigation or drainage. Federal assistance will be available for the planning of either or both.

The Service will point out to local organization(s) all of the types of improvements authorized for assistance under the Act. If the local organization(s) desires to proceed with flood-prevention improvements without planning justified irrigation or drainage, the work plan will be prepared on this basis. Likewise, justified measures for flood prevention may be omitted, provided their omission does not increase or adversely affect the cost of installation, operation, and maintenance of irrigation, drainage, or other agricultural water-management facilities.

The Service will encourage the use of dam sites for multiple purposes wherever such multiple uses are feasible. Where use of a site for both flood-detention capacity and storage for irrigation, municipal water supply, or similar purposes is desired by the local organization, the criteria described under item 7 of this section will be followed.

The Service will require the inclusion in plans for which Federal financial assistance is sought of all needed and justified land-treatment and

minor structural measures for runoff and sediment control which if not installed would adversely affect the installation cost, operation, or maintenance of the principal structural improvements.

Land-treatment measures will be planned for Federal and non-Federal land with a view to providing the highest feasible degree of runoff retardation and soil erosion control.

Where special measures are applied on land primarily to produce flood-prevention benefits, and where such measures are applied in lieu of structural measures, or where they will reduce the cost of structural measures, such measures shall be considered to be in the same category as structural measures for flood prevention. They will be evaluated for benefit-cost determinations and cost-sharing in the same manner as other structural flood-prevention measures. However, if such measures are frequently installed by land owners and operators with technical and financial assistance provided under other programs, the Federal share of the cost of such measures shall not exceed that under other programs current at the time of installation. An example of such a measure is level terraces in deep porous soils designed primarily for water-holding and infiltration purposes.

Structural measures for flood prevention will be so located and planned as to:

- (a) Protect the maximum area of land subject to flooding within the watershed.
- (b) Encroach to the least possible extent on productive alluvial flood plain or other land of high agricultural productivity.
- (c) Aim at providing sufficient protection to encourage landowners to make full and continuous agricultural use of land now subject to overflow although occasional damage from major storms may occur.
- (d) Provide for high degree of flood protection from major storms only where protection of human life or high nonagricultural values justify such protection in conjunction with protecting agricultural lands.

In recommending and assigning priority for Federal assistance, equal consideration will be given to flood-prevention benefits and to benefits from the agricultural phases of the conservation, development, utilization and disposal of water (irrigation, drainage, and other agricultural water management). However, benefits resulting from bringing land not previously in agricultural production into agricultural production as an incidental feature of the works of improvement would be excluded in considering priorities for assistance.

Agricultural and nonagricultural benefits from flood-prevention measures will be given equal consideration provided the benefits result from watershed works of improvement.

6. Economic evaluation of projects

The Act provides for Federal participation "in the installation of . . . works of improvement" only after it has been "determined that the benefits exceed the costs." The Act does not specify that benefits be evaluated in monetary terms. However, it is evident from the legislative history that Congress intended works of improvement, particularly structures, should have a favorable ratio of benefits to costs on a monetary basis before Federal financial assistance in installation was provided. It is, therefore, the Department's policy to require a favorable ratio of monetary benefits to costs for all structural measures or groups of measures for which the Federal Government shares in the cost of installation.

To provide ample insurance that monetary benefits from principal structural measures included in the work plan shall exceed their costs at the time of construction, the estimated costs of these measures shall include an allowance for contingencies applicable to the type of measure in accordance with prevailing engineering practices.

Experience has fully demonstrated that the combined private and public benefits from the installation of land-treatment measures acceptable to and paid for in large part by land owners and operators will exceed their costs. It shall, therefore, be the policy of the Service to consider that the large and practically universal excess of monetary benefits plus the value of intangible benefits from land-treatment measures fully justify additional technical assistance. No specific determination of monetary benefits from land-treatment measures will be required.

7. Limitation on capacity and use of structures

The Act limits the total capacity that may be provided in any single structure included in a plan for works of improvement submitted under it to 5,000 acre-feet.

Capacity as used in the Act is construed to mean the total volume of space available for water and sediment detention or storage behind a dam below the elevation of the emergency spillway at which discharge begins.

The limitation applies to the size of structure that can be included in a plan. Thus, no structure can be included in a plan if it exceeds 5,000 acre-feet of total capacity even if paid for entirely from non-Federal funds. Correspondingly, no Federal funds may be provided toward the cost of a structure exceeding 5,000 acre-feet of total capacity.

In preparing a plan under the provisions of the Act, however, consideration may be given to the need for a structure exceeding 5,000 acre-feet in capacity to be constructed within the watershed either with Federal funds provided under authorities other than Public Law 566 or with non-Federal funds, or with any combination of such funds. The costs and benefits of such a structure may be considered jointly with costs and

benefits of related works of improvement for which assistance is proposed under the Act. Such consideration is, in fact, required under the provisions of section 5(b) of Executive Order 10584. Therefore, the physical and economic factors relating to any such proposed structure exceeding 5,000 acre-feet must be described in the work plan but shall not be included in table I listing the proposed works of improvement in the plan.

The capacity allowance for sediment in any reservoir shall equal the volume of sediment expected to accumulate within the total capacity of the reservoir during a 50-year period after its construction. If a sediment pool is to be provided in a structure and its capacity would exceed the amount allowable under State law without a permit or water right, the outlet must be designed to conform with State law and applicable water rights.

The regulation of the withdrawal and use of any accumulated water from the sediment pool below the ungated outlet shall be a responsibility of the local organization(s) which has assumed responsibility for operation and maintenance.

Where flood occurrence is seasonal and predictable, capacity provided for floodwater detention may be used for temporary storage of water for beneficial use, if permitted by State law. The responsible local organization(s) prior to provisions of financial assistance, however, must enter into an agreement with the Soil Conservation Service or other concerned Federal agency to remove or maintain fully open any outlet gate installed on the structure to create temporary storage in the flood-pool area during such periods of time as the Service or other Federal agency may prescribe.

In such event the storage thus temporarily used shall not be considered as having been provided for any purpose other than flood prevention (provided this alone has been economically justified) in arriving at the sharing of costs, except that the cost of gates or other facilities for such regulation must be borne by the local organization.

8. Limitation on bringing new land into production

Federal assistance under the Act will be limited to protection against flood and sediment damages, conservation or protection of deteriorating or potentially deteriorating land, water, grass, and forest resources and provision of greater efficiency in the use and management of existing agricultural land through proper drainage, irrigation or other phases of agricultural water management. If facilities planned and justified primarily for these purposes result incidentally in providing conditions that permit conversion of some land from nonagricultural to agricultural production, this shall not be a bar to Federal assistance. Assistance will not be provided, however, where half or more of the monetary benefits are creditable to bringing land into agricultural production which has not previously been used for this purpose. Here, land

in agricultural production shall be construed to refer to all land which has been cleared or substantially improved and is used for pasture, hay, food or fiber crops. It does not include woodland, brush, wildland, or native range unless such land was formerly cultivated or in other agricultural production and has since reverted to a condition of nonuse or lesser use as a result of physical watershed deterioration.

9. Land acquisition

No authority for land acquisition by the Federal Government is contained in the Act. The Service will not provide for any Federal sharing in the cost of land acquisition for any purpose. It is recognized, however, that in some watersheds acquisition of land by local organizations or the States may be needed to provide for adequate treatment and stabilization of such lands for flood prevention and other purposes. Such proposed land acquisition may be included in the work plan as a non-Federal cost and the costs of such acquisition may be taken into account in determining the Federal and non-Federal shares of the total project cost.

10. Fish and wildlife, recreation, pollution abatement, and related benefits

In making surveys and investigations to determine the feasibility of preparing a work plan, the Service will give consideration to watershed problems of fish and wildlife, recreation, pollution abatement, stabilization of streamflow, and related benefits. It will endeavor to determine if the proposed works of improvement will have any significant effects on these watershed problems.

The Service will invite concerned Federal and State agencies to participate in determining if significant effects will result from the proposed plan of improvements.

If it is determined that significant adverse effects on fish and wildlife might be brought about, the Service will call on the Federal Fish and Wildlife Service in cooperation with the concerned State agencies to carry out appropriate investigations as mutually agreed upon. Such investigations shall be considered as a part of the project planning to be paid from funds made available for that purpose. The results of such investigations shall be included in the project work plan.

The Service will weigh carefully any recommended works of improvement that would adversely affect fish and wildlife and at all times foster any improvements that benefit fish and wildlife resources, including their protection and enjoyment by the public.

The Service will assist local organization(s) in planning for the operation of works of improvement so as to provide any possible benefits in public recreational use, pollution abatement, and regulation of the low water flow of streams so long as such operation does not conflict with the primary purposes for which such improvements are installed.

11. Project scheduling

It shall be an objective in determination of priority for planning and in scheduling Federal assistance in carrying out a project that the work be accomplished over the shortest feasible period. Short-term scheduling is based on the premise (a) that local people and local organizations have already accomplished most of the objectives that can be accomplished with assistance from programs carried out under other authorities, and (b) that prior to provision of assistance in installation under the Act, local organization(s) are fully informed, willing, and able to carry out the agreed upon non-Federal responsibilities in the project.

Based on these premises most projects should be scheduled for completion in 5 years or less after installation funds are made available, unless exceptional circumstances warrant a longer period and full justification therefor is set forth in the work plan.

12. Priority of assistance

Priority for Federal assistance must be considered at every stage from application by a local organization(s) to completion of installation of works of improvement in an approved watershed project. Specifically, priority decisions must be made at these stages.

- a. Priority of providing assistance in investigations and surveys to determine the feasibility of work-plan preparation among several applicant local organizations within the State.

The first priority determination to be made within the State is in many respects the most important of all. Recommendation of priority by the authorized State agency and by the State Conservationist should be based on an adequate field examination (sec. 3) consisting of:

- (1) Inspection by experienced technicians of conditions in the watershed to appraise the problem as represented in the application for assistance and the likelihood of a physically and economically feasible solution.
- (2) Appraisal of the extent to which local people and their organizations have already used their available local resources and assistance available from other State and Federal programs in an effort to achieve a solution of their problems.
- (3) Consultation with representatives of the sponsoring local organization(s) and other local interests, such as farm and ranch leaders, bankers, businessmen, etc., as well as local governmental officials to appraise the extent of understanding, willingness, and ability of local organizations to carry out, operate, and maintain the types of improvement needed.

b. Priority in national approval for providing planning assistance

The following policies will be observed in approving investigations and surveys of watersheds for which qualified applications have been received and priorities have been recommended by the States.

- (1) The cost of planning the total number of watersheds approved at any one time will not exceed the Service's estimated total resources for planning assistance for more than 12 months in the future.
- (2) The cost of planning the total number of watersheds approved at any one time within any one State will not exceed the resources made available to that State for planning assistance for more than 12 months in the future. Ordinarily, this will limit active approvals to not more than four watersheds per planning party at any one time.
- (3) The Service will allocate available resources for planning as equitably as possible among the States, giving due consideration on a national basis to the same factors used within the State in judging priorities. Assuming equal conditions of physical need, economic justification, local understanding, willingness and ability, and State aid, planning assistance will be allocated on the basis of such factors as agricultural land area, population and property values directly affected by potential watershed improvements, and related factors rather than on the basis of number of State-approved applications received from any given State.
- (4) When the maximum number of approvals have been granted in any State under the above criteria, additional approvals will be granted only when (a) investigations and surveys needed for a work plan have been completed, or (b) it has been determined the development of a work plan is not feasible or should be deferred. At such time as additional approvals are warranted, the State agency will be requested to review all applications received to that date and recommend additional priorities. In other words, priorities shall remain flexible and subject to revision at all times until approval has been granted for carrying out surveys and investigations.

Where it is found that a feasible project can be developed, a work plan will be prepared on the basis of surveys and investigations. Following completion of surveys, but not necessarily awaiting work-plan submission, approval may be granted for surveys and investigations in a new watershed. The Administrator should be notified 30 days in advance of the time at which resources will become available to provide planning assistance on additional watersheds.

- c. Priority in completion and submission of work plans for review and authorization of Federal assistance in installation of works of improvement.

In many watersheds, surveys and investigations must proceed to certain stages before it can be determined whether a physically and economically feasible project can be developed and whether local organizations and the States are willing and able to meet the requirements of carrying out the project. Every effort should be made, therefore, to obtain the continuing participation of local organizations and State agencies in the surveys and investigations with a view to determining at the earliest possible stage the existence of any physical or economic factors that would make it impossible to carry out a successful project.

When surveys and investigations develop information that lead field officers of the Service to conclude that a feasible project cannot be developed or should be deferred, the facts shall be presented to the sponsoring local organization(s) and others concerned with the view to reaching a mutual understanding as to the continuance, termination, or deferral of such surveys. Surveys will be terminated or deferred if either Service representatives or the local organization(s) concludes after a full hearing that a feasible project cannot be developed at this time. Wherever possible such action should be mutually agreed upon. A report should be submitted to the Administrator setting forth the circumstance which led to the termination or deferral of surveys.

- d. Priority in submission of work plans for approval of Federal assistance in installation and allocation of funds following such submission

Work plans submitted by the State Conservationist to the Administrator, Soil Conservation Service, will be transmitted by the Administrator to other Federal agencies and the Governors for review and thereafter transmitted to the Congress through the President as expeditiously as possible without regard to any priorities.

Completion of the prescribed processes established by the Act will establish a priority, however, for provision of Federal assistance in carrying out the project. This priority will be based on the annual schedule proposed in table 1 of the work plans. Federal assistance can be provided only within the total funds available at any time for carrying out works of improvement. When the limit has been reached, no assistance will be provided on additional eligible projects until or unless available funds are more than sufficient to maintain the agreed upon schedule for Federal assistance on projects which have received prior approval for assistance.

e. Priority in installation of measures

Although table 1 of the work plan will show a projected schedule of installation of measures, the Service will assist the local organization(s) in maintaining a continuous review of this schedule in consideration of such factors as completion of required land treatment, completion of structural design, delays in completing contracts, and all other unforeseen or not fully predictable factors. Priorities for each item of work involving Federal assistance may be changed and rescheduled at any time.

13. Availability of land, easements, and rights-of-way

Prior to providing Federal financial assistance for the installation of any structural works of improvement within a watershed, the local organization(s) must have obtained all necessary land, easements, and rights-of-way for all structures within one or more designated construction units. A construction unit is defined as a group of closely related or interrelated structures which will provide benefits in excess of cost. A construction unit usually consists of all structural works of improvement located in the headwaters of, or on a tributary to, the main stream of the watershed under consideration.

SECTION 3

APPLICATION FOR ASSISTANCE

I - Requirements for Valid Application

Applications for assistance under the Act may be submitted to the Administrator of the Soil Conservation Service by any qualified local organization(s). To qualify as a proper application, certain minimum requirements must be met:

A. State approval

Each application must be submitted to the State agency having supervisory responsibility over watershed programs or to the Governor if no such agency exists. If the application is approved by the State agency or the Governor, their approval should be shown on the signature page of the application. State agency will be used in this Handbook to mean the State agency having supervisory responsibility over watershed programs, the Governor, or an agency authorized by the Governor to review applications.

B. Qualified sponsoring local organization(s)

An application will be accepted only from:

1. A local organization having authority under State law to carry out, maintain, and operate the works of improvement contemplated in connection with a particular application, or
2. A group of two or more local organizations having combined authority under State law to carry out, maintain, and operate the works of improvement contemplated in connection with a particular application.

(Often, the applicable State law will provide that the power of the local organization to carry out its authorized activities on private land is dependent upon obtaining the consent of the landowner, whether in the form of a permit, easement, right-of-way or otherwise).

If organization(s) not having the required authority under State law desire to endorse the application, they may do so, but such organizations shall be clearly indicated as endorsing organizations and not as sponsoring local organizations.

C. Eligible watersheds (Sec. 2)

The area in which a sponsoring local organization(s) is authorized to carry out, maintain, and operate works of improvement must include all areas other than Federal land upon which any works of improvement are to be installed. The authorities of sponsoring local organizations, as they concern a particular watershed, may be identical, coincide, overlap, or be entirely separated from each other.

Example: If among a group of sponsors for a watershed, the drainage district is the only local organization with legal authority to carry out, maintain, and operate drainage works of improvement,

the drainage part of the proposed project must be confined to the area in which the drainage district has legal authority to operate. The authorities of co-sponsoring local organization(s) must cover all the area for which other types of works of improvement are needed to provide a complete watershed project.

Small areas in which sponsoring local organization(s) do not have authority to operate may be included in a watershed project when the field examination shows that the lack of works of improvement in such areas will not have an appreciable effect on carrying out, maintaining, and operating the project.

II - Form of Application and Attachments

A form of application mutually satisfactory to the State agency and the State Conservationist should be developed for use in each State. It is suggested that it provide the following information:

- A. Title of application.
 Statement of request for assistance.
 Name of watershed and size in acres.
 Name of State and of each county in which watershed is located.
- B. A brief statement of what the sponsoring local organization(s) believes to be the problems, the types of treatment needed, and the proposed local participation under the following headings:
 1. Watershed problems
 - a. Floodwater and sediment damage

 Describe the flood problem of the watershed, including dates and estimated damages caused by past floods; area affected by flooding; effect of sediment on water supplies, channels, drainage ditches, and irrigation systems; loss of life from floods; effect of floods on agricultural production; and any other damages caused by floods.

 Support the information in the application if necessary, by news clippings and pictures as appendixes to the application.
 - b. Erosion damage

 Describe extent and severity of sheet, gully, and streambank erosion in the watershed, including the effect on agricultural production and sediment damage downstream.
 - c. Water use and management problems

 Describe any other water problems of the watershed, such as the need for drainage, irrigation, agricultural and urban water supply, water management for fish and wildlife resources, and pollution abatement.

2. Types, extent, and probable location of watershed-treatment measures believed to be needed. Under such specific terms as:

- a. Land-treatment measures
- b. Flood-prevention structural measures
- c. Drainage-structural measures
- d. Irrigation-structural measures
- e. Other agricultural water-management structural measures
- f. Other

3. Local participation

State how local organizations and people propose to participate, including answers to the following questions:

- a. Does the sponsoring local organization having taxing power?
- b. Do other local agencies cooperating with the sponsoring local organization have adequate taxing power?
- c. Can condemnation procedures be used in obtaining land, easements, and rights-of-way?
- d. What credit facilities are available for installation of needed watershed measures?
- e. Can needed special-purpose districts with taxing powers be organized under existing State laws?
- f. What financial resources are available to the local organization(s) to:
 - (1) Assist with investigations and planning work?
 - (2) Install works of improvement?
 - (3) Operate and maintain works of improvement?

4. Status of local organization(s)

When one of the sponsoring local organizations is other than a soil conservation district, county, or municipality, include a citation of the State enabling legislation under which it was created. This information is necessary to check on the legal authority of the sponsoring local organization.

C. The signature page of the application should be in substantial conformance with that of the sample form of application included in this section and should contain:

- (1) The correct name of the qualified local organization(s) sponsoring the project and the signature of the individual signing for it, together with his title;
- (2) An attestation of the authority of the individuals who sign the application on behalf of the sponsoring local organization(s) or a copy of

the resolution or excerpts from the official minutes as an attachment thereto;

(3) The approval of the application by the State agency;

When the application is sponsored by two or more local organizations, it is desirable that one individual be designated to receive correspondence and arrange for meetings or conferences originated or suggested by the Soil Conservation Service or other agencies.

- D. Supplemental material such as previously prepared reports similar to the flood-prevention reports by the Department of Agriculture or other agencies, newspaper items, pictures, and lists of names or resolutions from endorsers that are not legally qualified sponsors may accompany the application, but should not be made a part of it.
- E. A map, preferably to scale, should accompany the application showing at least the following:
 - 1. Location of watershed with relation to county boundaries. This may be by use of a nonscale insert if desired.
 - 2. Boundary of the watershed covered by the application.
 - 3. Location and name of principal watercourse into which the drainage of the watershed empties.
 - 4. The principal towns, roads, and large areas of public land.
 - 5. The boundaries of the local organizations sponsoring the project, or a statement on the map to the effect that the watershed is entirely within said boundaries. If there are important exclusions they should be indicated on the map.
- F. Cover or folder

Fasten the material together to prevent loss and damage and to permit a more easy review of the application. A simple manila folder will answer the purpose. Arrange material so the application will be in the first part of the folder followed by newspaper articles, pictures, and resolutions from endorsing organizations.

III - Handling Applications within States

The following procedure for handling applications is recommended:

- A. Submit each application in sufficient number to provide three manually signed documents, of which the original and one copy will go to the State agency and one copy to the State Conservationist concerned.
- B. When the State agency approves the application, its representative should sign in the proper place on the signature page of the application. Transmit the original (containing all manual signatures) through the State Conservationist to the Administrator.
- C. If possible, the State Conservationist should develop working arrangements with the State agency that will result in State action on applications

only after field examinations have been made or adequate data are already available from previous studies.

- D. The State Conservationist should transmit the original application to the Administrator together with two copies of the field examination report, the priority of the application, if such was designated by the State agency, and his recommendation, and a typed list of organizations, names of signers and their mailing addresses for all the sponsors and endorsers to the application.

IV - Field Examination

A field examination report must accompany the application when forwarded to the Administrator of the Soil Conservation Service. Supplemental information, such as group facility and flood prevention reports may also be included. A field examination, as referred to here, includes the preparation of a report following the outline in paragraph D. This may or may not require an onsite examination.

A. When to make a field examination

On receipt of a copy of the application submitted to the State agency by the sponsoring local organization(s) and after consultation with the State agency.

B. When not to make an examination

1. If the State agency, based on information available to it, has disapproved the application.
2. If the State Conservationist determines that the application is not qualified on one or more of the following conditions:
 - a. The watershed described in the application is not eligible (too large, etc.) under the Act.
 - b. Local organization(s) submitting the application do not qualify as "local organization(s)" under terms of the Act.
 - c. The purposes set forth in the application are clearly outside the scope of the works of improvement authorized in the Act.

C. Procedure

1. The preparation of the field examination report is the responsibility of the State Conservationist. It is important that all the principal agencies and/or organizations which may participate in developing and carrying out the watershed work plan, if the watershed is authorized for planning, should have a part in furnishing information for the field examination report. The State Conservationist should invite such agencies to participate in developing the report.
2. The policy statement on obtaining information for the report is set forth in Section 2.

3. The application contains information on the problem and objectives as recognized by the sponsoring local organization. It should be used as a guide in making the field examination report.
4. Only sufficient information should be obtained, if a field study is necessary, to determine the eligibility of the watershed as a potential project.
5. The field examination party will prepare a report on each watershed it studies. The party is a fact-finding body and does not make decisions. The party will save the Service embarrassment and time if the party will make perfectly clear to the local people that it is in the watershed only to collect information.
6. Each participating agency will receive requested copies of the field examination report. The State agency will receive a copy of the field examination report regardless of whether or not its personnel participated in the study. Copies of each field examination report will be distributed in the Service as follows:
 - a. One copy will be retained in the State office.
 - b. One copy will be sent to the Engineering and Watershed Planning Unit.
 - c. One copy will be sent to the Washington Field Plant Technologist (liaison).
 - d. Two copies will be sent to the Administrator, SCS, by the State Conservationist.

D. Guide for preparation of field examination report

Briefly describe all the factors that are important in determining the suitability or unsuitability of the watershed as a project under the Act. Arrange the report as nearly as practicable in the following order of item headings:

1. Watershed characteristics

Briefly describe the characteristics of the watershed area which will affect a project under the Act, such as:

- a. Topography and geology.
- b. Soils and erosion.
- c. Rainfall with respect to intensity, average annual, and seasonal.
- d. Floodwater runoff resulting from snowmelt, gentle or high-intensity rains, poor watershed cover, etc.
- e. Agricultural uses of flood plain, cultivated land above the flood plain, and the uses and plant cover condition of the land not under cultivation.
- f. Water supplies.

2. Ownership and tenure

Briefly discuss status of ownership and tenure in the watershed.

3. Watershed problems

Comment on the problems listed in the application; then describe any other problems which from the examination appear to exist. Be specific by using figures even if they are estimations, rather than adjectives. It is not intended that average annual damage figures will be determined. The following are given as guides to items that may have a direct bearing on the proposed project:

a. Floodwater and sediment damage

Describe the flood problem of the watershed, including dates and estimated damages caused by past floods; area affected by flooding; effect of sediment on water supplies, channels, drainage ditches, and irrigation systems; loss of life from floods; effect of floods on agricultural production; and any other damages caused by floods.

b. Erosion damage

Describe the apparent source, extent, and severity of sheet, gully, and streambank erosion in the watershed, including effect on agricultural production and sediment damage downstream.

c. Water use and management problems

Describe existing facility and any water problems of the watershed, such as the need for drainage, irrigation, and agricultural and urban water supply, and water management for fish and wildlife resources and pollution abatement.

4. Project objectives

Explain any important difference between, or addition to, the objectives listed in the application and those listed in the field examination report. Where applicable, cover at least the following items:

a. Land treatment on private land

- (1) List the conservation measures most important to the success of a project. Show estimated percent of required practices that are applied.
- (2) Describe status of conservation plans such as percent of watershed covered, progress in the last two years; and possibilities of accelerating the planning and application.

b. Land treatment on Federal and other public land

- (1) List the conservation measures which will be most important to the success of a project. Show estimated percent of required practices established.

- (2) Describe the types of conservation practices and the amount being established annually under going programs.
- (3) What plans do the public agencies have for establishing the needed conservation measures?
- (4) What is the local attitude toward assisting the public agencies to complete or establish the needed conservation measures?

c. Flood-prevention structural measures

- (1) List the principal existing structures or groups of structures, their purpose, how financed, and the effectiveness of the program of maintenance and operation.
- (2) List and give general location and characteristics of flood-prevention structures that may be considered. Include a statement on the apparent feasibility of the sites, with reference to foundation and full material and availability of necessary rights-of-way.
- (3) Explain the possibility of structures with multiple objectives. (Sec. 2)

d. Irrigation measures

- (1) List the principal existing structures and main distribution systems, water-delivery systems, their purpose, how financed, and the effectiveness of the program of maintenance and operation.
- (2) Describe the methods of irrigation being used and the apparent efficiency of each. If more efficient irrigation methods are needed, do the local people recognize that fact? Have any outstanding establishments of improved practices been made in the last few years?

For instance, what is being accomplished through the ACP and conservation planning?

- (3) What benefits may be expected from improvements in the distribution or storage systems, the water-delivery program, water supply, and in improved methods of water application?

e. Drainage measures

- (1) Describe the drainage outlets, principal laterals, levees, dikes, pumping plants, and other group works needed and the area which they would benefit.
- (2) Describe existing drainage, works of organized drainage districts, and appraise need for rehabilitation and improvement.
- (3) Show how flood prevention, land treatment, irrigation measures, and work of other agencies will relate to needed drainage works.

- (4) Provide information readily available as to need for additional drainage districts and the practicability of their organization.
- (5) Describe the kinds of drainage problems and investigations needed.
- (6) Describe farm drains needed and status of farm-drainage work.

f. Measures for recharging underground water basins

Describe any existing measures or proposed measures.

g. Municipal water supply

Discuss how this phase of water development may affect the project.

h. Possible effect of project on existing fish and wildlife habitat and values

Consider any information available from Federal and State fish and wildlife agencies.

i. Possible effect of project on existing or needed recreational facilities

j. Water rights

(1) Describe the main sources of water supply.

(2) List the difficulties and problems that can be anticipated before storage or diversion works can be constructed for both large and small quantities of water.

5. Effect of project outside of watershed

Describe kinds of benefits that may be expected to accrue outside the watershed.

6. Other programs

Describe any present or proposed programs of State or other Federal agencies that may have an effect on, or be affected by, the project under the Act. These would include programs such as those of the Department of the Interior, Department of the Army, and other programs of the Department of Agriculture.

7. Group action

A successful project under the Act requires that local people must work closely together. In some localities this type of cooperation is well advanced and in others it will have to be developed.

List and describe some of the group-type undertakings that have been accomplished in the last five years. These may include group facility jobs, ACP pooling agreements, formation of irrigation, drainage, or improvement districts, etc.

8. Excluded areas

If there are any areas in the watershed where the sponsoring local organization(s) is not authorized to operate, the field examination report must state the effect the exclusion of such areas may have on the proposed project.

9. Interest of local people

Briefly describe the programs planned and under way, and what they are accomplishing. This should indicate the extent of active interest in the proposed type of project by local groups, such as:

- a. The soil conservation district governing body
- b. Urban people
- c. Farmer and rancher groups
- d. Business leaders
- e. Municipal, county, and State units of government
- f. Watershed associations
- g. Newspapers, radio, and TV stations

10. Local participation

State how local interests propose to participate. The answers to the following questions will offer some guides in determining whether to approve planning assistance.

- a. Can funds be raised for watershed projects by taxation?
- b. Are other sources of funds available?
- c. Can condemnation procedures be utilized in obtaining land, easements, and rights-of-way?
- d. What credit facilities are available for the installation of needed watershed measures?
- e. Can special purpose districts with taxing powers be organized under existing State law?
- f. What are the financial resources of the sponsoring local organization?

- (1) For work plans and investigations?
- (2) Installation of works of improvement?
- (3) Operation and maintenance of works of improvement?

11. Estimated time to complete project

State the estimated time believed required to install the works of improvement on the watershed.

- a. Land treatment
- b. Structural measures

12. Summary statement

Indicate the physical and economic factors as they relate to the development of a watershed project.

13. Using the best available base, prepare a map showing the information required in II, Paragraph F of this section.

V - Approval of Application

Final approval of applications for assistance will be granted by the Administrator, Soil Conservation Service.

VI - Notification of application approvals

The Administrator, Soil Conservation Service, will advise the Secretaries of concerned Federal Departments and the Governors of concerned States, of the approval of each application and of his intention to immediately initiate the necessary surveys and investigations. The State Conservationist will simultaneously be advised of each approval. It will be the State Conservationist's responsibility to advise concerned State and Federal agencies and the sponsoring local organization(s) of each approval. Immediately following notification of approval, the State Conservationist will make arrangements to provide planning assistance to the sponsoring local organization(s). (Sections 16, 17 and 18).

VII - Applications not approved

The following procedure will be followed when applications are not approved:

- A. The State agency may disapprove the sponsoring local organization's application. Here, the State Conservationist should notify the Administrator, Soil Conservation Service, of the action taken by the State agency, and no further action will be taken with respect to that application.
- B. The State Conservationist may determine that an application is inadequate. Here, the State Conservationist should work closely with the State agency and the sponsoring local organizations with the intent of correcting the deficiencies.
- C. An application may be determined as not qualified by the Administrator. The State Conservationist will be advised of this.

It will be the responsibility of the State Conservationist to advise all agencies or parties within the State who will be concerned with the action taken and endeavor to have the application corrected, if practical, and if the local organization(s) desires. These questionable applications will be retained in the Washington office for future reference unless it appears desirable to return them for correction or their return is requested.

- D. In case the Administrator disapproves an application, he will follow procedures as prescribed in Executive Order 10584, Section 2.

VIII - Amendments to Applications

Any significant amendments to the application, relative to purpose, scope or sponsorship must originate with the sponsoring local organization(s) and be submitted in the same manner as the original application.

For example, an increase or decrease in the size of a watershed may be made by an amendment to the original application. The amendment may be in the form of a letter submitted to the Administrator of the SCS through the same channels used in submitting the original application. A revised map should be attached. The letter or amended application must be signed by all the sponsoring local organizations, with attestations or other evidence showing authorization for signing. Also, approval by the State agency must be indicated by their signature on the instrument. Signatures to the letter or amendment should be arranged similar to that shown on the signature page of the sample application. If the amendment is for a watershed which has been authorized for investigation by the Administrator and he is in agreement with the amendment, he will notify the agencies concerned of his decision with respect to the amendment. If no action has been taken on the application, the amendment will simply be made a part of the original application.

IX - Suggestions for groups considering submitting an application

The Service is obligated to furnish information on the Act when requested, and the following steps are suggested:

- A. Furnish such basic information as a copy of the Act, and any information the State agency has developed. It is desirable that this material go to the local group from the State agency. The State agency should be advised of any information furnished by the Soil Conservation Service and encouraged to assist the group in preparation of their application.
- B. Full consideration of the project, including responsibilities of the local landowners, should be urged before an application is submitted. In most States a soil conservation district is qualified to be a sponsor to an application and the governing body is in a good position to carry out the education and information work necessary to acquaint the people in the area with the project and to help determine if the interest is sufficient to warrant submission of an application.
- C. Often other agencies will be involved and can give assistance to the project. The local group should be urged to consult with them for advice and to determine what assistance they might be able to get from such agencies.
- D. If the watershed is small or the problems are relatively simple, it may be quicker and easier for the local group to solve their problems without applying for assistance under the Act. They may be able to get considerable assistance from such sources as ACP under pooling agreements, FHA loans, State and county funds, and technical assistance from the local soil conservation district.

X - Application for Watershed in two or more States

An application covering a watershed including non-Federal land in two or more States must be signed by qualified local organization(s) in each State, and must be submitted to the State agencies of all States concerned. The processing of the application will be in accordance with arrangements mutually agreed upon by the State Conservationists and State agencies concerned.

APPLICATION FOR ASSISTANCE IN PLANNING AND CARRYING OUT WORKS OF IMPROVEMENT
UNDER THE
WATERSHED PROTECTION AND FLOOD PREVENTION ACT

(PUBLIC LAW 566 - 83rd CONGRESS)

TO THE HONORABLE
THE SECRETARY OF AGRICULTURE
UNITED STATES DEPARTMENT OF AGRICULTURE

The undersigned local organization(s) makes application for Federal assistance under the Watershed Protection and Flood Prevention Act in preparing and carrying out plans for works of improvement for the _____ watershed, State of _____.

The following information is submitted in support of the application:

1. Size of watershed: _____ acres
2. Location of watershed
 - a. State(s) _____
 - b. County(ies) _____
 - c. Tributary of _____
3. Watershed problems:
4. Types, extent and probable location of watershed treatment measures
5. Local participation
6. Status of local organization(s)

4/19/55

Witness the signatures of the undersigned local organization(s) on the dates shown below. EType or print all information except signatures)

(Name of Local Organization)

By: (Sig.) _____
Title _____

(Date)

This action authorized at an official meeting of _____
(Name of Local Organization)
on _____ 19_____, at _____
State of _____
Attest: (Sig.) _____
(Secretary)

(Name of Local Organization)

By: (Sig.) _____
Title _____

(Date)

This action authorized at an official meeting of _____
(Name of Local Organization)
on _____ 19_____, at _____
State of _____
Attest: (Sig.) _____
(Secretary)

(Name of Local Organization)

By: (Sig.) _____
Title _____

(Date)

This action authorized at an official meeting of _____
(Name of Local Organization)
on _____ 19_____, at _____
State of _____
Attest: (Sig.) _____
(Secretary)

The above local organizations request that all correspondence or contacts pertaining to this application be directed to:

Name

Mail Address

The foregoing application for Federal assistance under the Watershed Protection and Flood Prevention Act is hereby approved.

(State Agency)

By _____
Title _____
Date _____

SECTION 4

WATERSHED WORK PLAN AND APPROVAL

The watershed work plan will describe the watershed and its problems and set forth clearly and concisely a plan, a schedule of operations, the estimated cost, proposed cost-sharing arrangements and other responsibilities of those participating in the project, and economic justification for installing, operating, and maintaining those measures needed for the protection and improvement of that watershed. One of the primary purposes of the watershed work plan is to inform the President, the Congress, and the public (1) of the needs and desires of the local people, (2) of the proposed expenditures of Federal funds on the watershed project, and (3) the justification for such expenditures in accordance with National authorities, policies, and regulations.

While first use is at the local level, it is equally important that the State agency, the Administrator, SCS, the Secretary of Agriculture, other interested Federal agencies, the President, and the Congress gain a real understanding of the watershed, its problems, and the recommended plan for improvements. The watershed work plan becomes the official document upon which all works of improvement on the project are based and Federal funds are budgeted following its transmission to the Congress as required. It does not contain details of design and related information which must be developed at the time of project installation, but does contain sufficient information to support the project.

The watershed work plan will not be construed to obligate Federal funds. The allocation of funds to carry out the proposed work will be dependent upon availability of appropriations at the time of project installation.

The watershed work plan must contain, as a minimum, the information outlined in the Guide Watershed Work Plan, section 23 of this handbook, but may also contain such further descriptive material or details as may be needed to make it serve most effectively in carrying out the project.

A watershed work plan is developed by making an inventory of the watershed conditions and problems, estimating costs of proposed works of improvement, estimating benefits, determining cost-sharing arrangements and other responsibilities of those participating in the project, and preparing a schedule of operations for carrying out the project.

Assistance in the development of watershed work plans should be provided the sponsoring local organization(s) only so fast and with such intensity of activity as is warranted by local interest, desire, and understanding. This approach is fundamental for reaching common conclusions and recommendations necessary to result in a mutually acceptable and agreed upon work plan.

The processes involved in developing a watershed work plan will be discussed under two broad headings; Administrative and Technical.

A. Administrative

1. Responsibility of local organization(s)

Since local initiative is basic in the development of watershed work plans, it is important that there be actual working arrangements with the local organization(s) in all phases of work plan development. The watershed work plan is the proposal of the sponsoring local organization(s) and Department of Agriculture to the Congress for works of improvement specified in the Act. A number of considerations must be met prior to final completion of a watershed work plan.

2. Initiation of work plan surveys and investigations

The State Conservationist, after an application for assistance has been approved by the Administrator and necessary arrangements have been made with the sponsoring local organization(s), will notify, in writing, the sponsoring organization(s) and the local offices of all concerned Federal and State agencies of his intention to assist in the development of the watershed work plan, and will invite their assistance and cooperation.

Immediately following the approval of an application by the Administrator, the State Conservationist will contact the State Forester and the proper Forest Service field official and with them will jointly determine whether or not the services of a professional forester is needed on the watershed work plan party. If so, the Forest Service representative will arrange for the assignment of a forester (Forest Service or State forestry agency) to the watershed work plan party for the length of time necessary to (1) prepare the inventory of existing woodland conditions within the watershed, (2) recommend the land-treatment measures to be included in the watershed work plan for private nonfarm woodlands, and (3) assist the work unit conservationist in developing the recommended land-treatment measures for private farm woodlands.

Following the development of the recommended land-treatment measures, the local organization(s), the State Conservationist, the Forest Service, and the State forestry agency, will confer regarding the manner in which technical assistance will be provided for the installation of land-treatment measures on private farm and nonfarm woodlands. This group will analyze existing and potential technical assistance facilities within the watershed and develop mutually agreeable assignments within the criteria established in section 10 for providing technical assistance on woodlands during the installation period. The resulting technical assistance assignments will be indicated in table 1 of the watershed work plan.

3. Relation of proposed project to other projects or programs

Consideration must be given to any existing or proposed projects or programs which would significantly affect or be affected by the proposed works of improvement. To the extent required to make such determinations, investigations and surveys may be made beyond the boundaries of the watershed. The Administrator, SCS, is required to certify to the Secretary that the proposed works of improvement constitute needed and harmonious elements in the comprehensive development of the river subbasin or river basin involved.

4. Progressive development of plan

A watershed work plan may be developed most effectively by stages. As information is developed, it should be made available to and discussed with all parties concerned in the development of the plan. When it becomes apparent at any stage of the plan's development that the sponsoring local organization(s) is unable or unwilling to meet requirements of the Act or Department policy, planning activities should be suspended until assurance is given that such requirements will be met. The Service will reconsider with the local organization(s) the objectives of the project or the intensity of the work proposed in an effort to meet the ability and desires of the local organization(s). Whenever the sponsoring local organization(s) indicates that it cannot or will not meet the cost-sharing requirements, steps will be taken immediately to terminate work-plan preparation.

5. Legal requirements of sponsoring local organization(s)

In the development of early draft copies of the watershed work plan, it will be necessary to determine that arrangements can be made for conformance to section 4 of the Act.

6. Project contributions by nonsponsor

When any non-sponsoring agency or organization is to bear any portion of the cost of the watershed project, it will be the responsibility of the sponsoring local organization(s) to obtain the concurrence in writing of such other agency or organization to its part in carrying out the watershed work plan prior to submitting it to the Administrator, SCS, for approval.

7. Review of work plan

When a tentative agreement on a complete watershed work plan has been reached, the State Conservationist will be responsible for adequate reviews within and outside the Service. Arrangements for review will be made with field offices of other agencies within the Department and other agencies of the Federal Government, and with State agencies having interests or responsibilities in the plan.

8. Approval of work plan

- a. When all comments have been received (within prescribed time limits) the State Conservationist will make them known to the local organization(s), and discuss with it any suggested amendments in the plan. When all amendments, mutually acceptable to the sponsoring local organization(s) and Service representatives, have been made in the tentative work plan, five copies will be submitted to the Administrator, SCS, for approval.
- b. Upon approval by the Administrator the tentative watershed work plan will be returned to the State Conservationist for final negotiations with the sponsoring local organization(s).
- c. Upon completion of the final negotiations at the local level, and the formal signing of the watershed work plan agreement by the sponsoring local organization(s), arrangements will be made to duplicate copies of the final watershed work plan. Five copies, with manual signatures of the sponsoring local organization(s), plus 50 copies with typed signatures will be submitted to the Administrator, SCS, for final review at the Washington level by all concerned Federal agencies, and for final approval by the Department of Agriculture. Upon approval, the Secretary will transmit the plan to the Congress through the President. The watershed work plan agreement, when properly executed, evidences the approval of the parties thereto, subject to availability of funds, to the terms, conditions, and stipulations set forth in the watershed work plan.
- d. Any watershed work plan which (1) includes irrigation works or which affects public or other lands under the jurisdiction of the Secretary of the Interior, or (2) includes Federal assistance for floodwater-retarding structures, will also be submitted by the Administrator to the Secretary of Interior or the Secretary of the Army, respectively, for his views and recommendations at least 60 days prior to transmission of the plan by the Secretary of Agriculture to the Congress. Plans will also be submitted by the Administrator to any other directly concerned Federal agencies for review and comment. Concurrent with submission to Federal agencies, plans also will be submitted to the State Governor or Governors concerned for review and comment. The views, comments, and recommendations of the Secretary of the Interior, the Secretary of the Army, other directly concerned Federal agencies, and Governor or Governors if received by the Administrator, SCS, prior to the expiration of the 60-day period, will accompany the watershed work plan transmitted to the Congress.

9. Revision of work plans

When any significant changes occur subsequent to the initiation of installation of works of improvement which affect the total cost, the scope of the project, or the economic evaluation, the necessary revisions or addendums will be submitted with the justifications to the Administrator, SCS, for his consideration and further action.

B. Technical

1. General technical planning

Often more than one combination of measures must be considered to reduce flood, sediment, and erosion damages, or provide irrigation, drainage, or other water-management improvements or benefits. Although every effort must be made to hold planning costs to a minimum, sufficient consideration should be given to each proposed combination of measures which appears practical. Estimates should be made of the approximate effect of damage reductions or benefits provided by each combination of measures.

Studies of soils, range sites and conditions, and other phases requiring specialists outside of the work plan party may need to be arranged for as soon as it appears that a feasible project can be developed. Sufficient surveys should be made to prepare sound preliminary cost estimates of all structures and other measures which are being considered for Federal financial assistance. The technicians and the sponsoring local organization(s) should study the various combinations of measures.

After the major elements of the works of improvement which will be included in the plan have been tentatively agreed upon, the technicians will make whatever additional studies, surveys, and analyses are required to complete a sound plan. The final plan selected should be the one which will most nearly provide the maximum net benefits in accomplishing the objectives of the local people.

All works of improvement planned under the Act shall conform to the Soil Conservation Service standards and criteria established for use in the State. When such works of improvement are planned for installation on Federal lands, they shall also conform to the standards of the land-administering agency involved.

When firm cost estimates have been made and all effects of the proposed measures in the plan have been determined, the comparison of the benefits and costs for all independent measures and each evaluation group of interdependent measures will be made. Only those parts showing a favorable ratio of benefits to costs are to be included in the watershed work plan. When the benefit-cost ratio for any measure or group of measures falls below 1.2 to 1.0

the cost estimate should be reexamined to make certain the installation cost will not exceed the estimate by an amount that would cause the item to be uneconomical at the time of installation.

2. Writing the watershed work plan

- a. The format and content of the watershed work plan required to meet the provisions of the Act for transmission to the Congress is given in section 23 of this handbook. The Service will assist the sponsoring local organization(s) in the preparation of the watershed work plan, incorporating all aspects of watershed protection and flood prevention, including the recommendations of all participating Federal and State agencies, mutually acceptable to the sponsoring local organization(s) and the Service.
- b. The Service is responsible for assuring that all parts of the work plan are fully coordinated, and that the tentative work plan correctly reflects the works of improvement which have been agreed upon. The Service will also be responsible for adherence to established technical standards, and compatibility with other programs of State and Federal agencies.
- c. Each of the following sections is designed to meet the needs of the participants in the project and must be included in each watershed work plan:
 - (1) The Watershed Work Plan Agreement is designed to meet the requirement of the Act.
 - (2) The Introduction states the authority under which the plan has been prepared, and what purposes the plan expects to accomplish, and to what degree or extent - total or partially.
 - (3) The Summary briefly states the major points in the plan.
 - (4) The Description of the Watershed gives the general physical and economic picture of conditions in the watershed.
 - (5) The Watershed Problems describes the erosion and water problems which the local people desire to do something about.
 - (6) The Investigations and Analyses briefly states the methods and procedures of study, survey, and analyses in the various technical phases involved in arriving at damages, formulation of the plan, its costs, the benefits, and the comparison of benefits and costs. It should be the basis or support for the works of improvement included in the plan.

- (7) The Existing or Proposed Water Management Projects and Measures states what has been done or is proposed to be done in the watershed and in the major drainage basin which will affect or be affected by the works of improvement included in the work plan.
- (8) The Works of Improvement to be Installed describes the practices and measures which are included in the work plan and the purpose to be served by such practices and measures, individually or in groups.
- (9) The Accomplishing the Plan states "who" is going to do "what" and "when".
- (10) The Provisions for Operation and Maintenance states what arrangements have been made by the sponsoring local organization(s) to comply with the requirement of the Act.
- (11) The Cost-Sharing sets out in detail the methods used in arriving at cost-sharing arrangements and justification for the proposed Federal share.
- (12) The Tables are provided for several purposes, most of them quite obvious. Table 1 lists the several measures and practices to be installed which qualify under the Act, the quantity of the item, cost, cost-sharing, when, and who is to accomplish the item.
- (13) The figures are included to present certain information best illustrated in a graphic manner. Figure 1 (structure location map) shows the location of major structural and other measures. Figure 2 (problem location map) is included to show graphically where the problems occur, kind, and extent of each. Figures 1 and 2 are required. Use of additional figures is optional, but they may be included if the sponsoring local organization(s) have a real need for them. For example, figure 3 could be a generalized use capability map and figure 4 a range site and condition map.

3. Technical procedures

a. Inventory of watershed problems and conditions

- (1) Since maps are used by all concerned in the development of the plan, a base map should be prepared to such size and scale that will meet all the needs. Reductions for use in the manuscript copies of the plan, or for use of the several technicians, as well as any enlargements needed, should be made from the one base map prepared for the watershed. Early availability of a land-ownership

map is desirable to assist the local organization(s) in solving the problems of securing land, easements, and rights-of-way when the locations have been determined for proposed structures, areas to be inundated, etc. Federal lands should be shown, by administering agencies, on the base and ownership maps.

- (2) Examination will be made of the land areas subject to overflow to determine the degree and extent of agricultural development; general stream characteristics; extent and degree to which sedimentation and scour are likely to be factors; general frequency and extent of flooding; potential productivity of the flooded areas; degree and extent of areas with potential for development by irrigation, drainage, or water management; and physical feasibility of control or improvement works.
- (3) Examination will be made of condition of existing irrigation, drainage, and other water-management facilities and related water rights.
- (4) Examination will be made of the irrigation organization's water-delivery program.
- (5) Examination will be made of the irrigation water utilization practices followed by local farmers.
- (6) Examination will be made of the water sources and water rights.
- (7) Examination will be made of works of drainage enterprises and need for rehabilitation or improvement. Farm-drainage practices will be reviewed, and need for improvements in such practices determined.
- (8) Examination will be made of upland areas (not subject to flooding) to determine soil and water conservation problem areas, general land use, cover conditions, extent of land treatment and structural measures installed, and the existence of any critical runoff or silt-producing areas.
- (9) Selection will be made of representative valley cross sections suitable for hydrologic, sedimentation, and economic studies.

NOTE: As the facts are determined they will be made available to the local people and discussed with them so they may gain the knowledge and understanding necessary to carry the project to its successful completion.

b. Determination of the plan and its justification

- (1) The final plan will depend on the desires of the local people, the physical characteristics and conditions of the watershed, and the benefits expected. Alternative works of improvement are included in this phase of the study.
- (2) Some of the surveys and studies which may be needed to formulate the watershed plan and determine its economic justification are as follows:
 - (a) Surveys of valley cross sections, profiles, and high water marks from known floods.
 - (b) Investigation of existing installations and surveys of potential sites for structures, debris basins, channel improvements, diversions, drainage ditches, irrigation works, water-distribution systems, etc.
 - (c) Calculation of installation, operation and maintenance, and annual equivalent costs of individual or groups of practices or measures recommended in the plan.
 - (d) Determination of needed land-treatment measures.
 - (e) Development of soil-cover complex data for present and future conditions.
 - (f) Determination of rainfall-runoff relationships.
 - (g) Delineation of area flooded showing land use, by crops or cover conditions, on maps or aerial photographs.
 - (h) Development of stage-discharge curves for valley cross sections.
 - (i) Development of discharge-area inundated curve to determine extent of flooding under present conditions and with planned measures.
 - (j) Determination of erosion damage on upland areas.
 - (k) Location of critical runoff and sediment producing areas.
 - (l) Determination of sediment output rates.
 - (m) Determination of areal extent and intensity of sedimentation and scour damages.

- (n) Obtaining yield data and damage schedules from land owners and operators, as well as county, State, highway, railroad, utility, urban, and other officials.
- (o) Reasonably accurate determination of farmers' intention to use areas previously flooded when hazard is reduced or removed.
- (p) Determination of total and average annual monetary floodwater and sediment damages.
- (q) Determination of increased income from more intensive use of lands subject to reduced flood hazard or improved by irrigation, drainage, or other water-management measures, and loss of income in proposed structure sites.
- (r) Determination of reductions in annual monetary damages accruing to each phase of the plan.
- (s) Determination of increased income from land-treatment measures on upland which are interdependent with structural works of improvement.
- (t) Study of water requirements, available water supplies, and water rights.
- (u) Determination of rehabilitation or new construction program for irrigation, drainage, or other water-management facilities with a schematic plan of structural proposals. This will include sources and development of water supplies, distribution systems, drainage systems, and all other pertinent installations.
- (v) Determination of suitability of irrigation water delivery program on systems to be rehabilitated, and revisions if necessary.
- (w) Comparison of expected benefits to estimated costs for each phase of the plan.

NOTE: The local people will receive this information as it becomes available. It should be discussed with them so they may gain the knowledge and understanding necessary to consider the possible alternatives.

SECTION 5

MEASURES ELIGIBLE FOR ASSISTANCE

All measures to be installed for the purpose of flood prevention, drainage, irrigation, or other phases of agricultural water management are eligible for some form of Federal assistance. Assistance may be provided in the kinds and amounts set forth in other sections of this handbook for the categories of measures described in the following paragraphs.

A. Land-treatment measures

1. Non-Federal Lands

Technical assistance may be provided under the Act for land-treatment measures to accelerate other national conservation programs to accomplish the objectives of the Act within the agreed upon schedule for project completion. These measures are essential elements of a watershed project, but they also can be installed profitably on privately-owned lands by individuals acting independently. They are not dependent upon group action for installation, nor group benefits for justification.

Land-treatment measures are necessary and justified for the conservation, development, and improvement of individual land ownerships. They would commonly be included in an individual conservation plan even without considering their important role in watershed stabilization and in assuring the continuing effectiveness of group facilities for flood prevention, drainage, irrigation, or other phases of agricultural water management. These measures should be installed prior to, or concurrently with, the installation of those structural measures which would be affected adversely in their absence.

All normal land treatment measures such as, land leveling, field drainage, clearing, farm irrigation systems, etc., associated with development of land necessary to take advantage of irrigation, drainage, restoration of productivity and change in flood plain land use should be treated as land treatment measures.

2. Federal Lands

Land-treatment measures, when necessary to accomplish the objectives of the Act, may be installed on Federal land under the authority of the Act, only to the extent that such measures would not be installed under the regular programs for administering such land within the period scheduled for completion of the project.

B. Structural measures for flood prevention

Assistance may be provided for structural measures for flood prevention which have a direct measurable effect in reducing erosion, flood-water, and sediment damage affecting groups of landowners, communities, and the general public. Individual landowners would not generally be expected to install such structural measures on their own land even with the forms of assistance supplied directly to them under other national conservation programs. These measures ordinarily require

group action for their installation and always require group benefits for their justification. They must be planned on a watershed-wide basis and may not necessarily be included in an individual conservation plan.

Structural measures for flood prevention may include any form of earthwork, either excavation or construction; erection of installations of concrete, masonry, metal, or other materials; the planting of vegetation associated with such structural work or required primarily for nonfarm purposes such as the stabilization of critical runoff and sediment producing areas; and installations for fire protection and control such as fire towers, roads, and firebreaks.

Structural measures for flood prevention include land-stabilization measures and waterflow-control measures.

1. Land-stabilization measures

Assistance may be provided for those land-stabilization measures installed primarily for the purpose of preventing land destruction and the production of damaging sediment which affects groups of landowners, communities, and the general public.

Measures necessary for grade stabilization; gully stabilization; streambank stabilization; roadbank and fill stabilization; establishment, development, or improvement of interfarm or subwatershed waterways; stabilization of critical runoff and sediment-producing areas; and fire prevention and control are eligible for assistance. These measures may consist of vegetative control, structural control, or a combination of the two including, but not limited to, tree planting; establishment of grasses, legumes, and other types of vegetation; shaping and seeding or sodding interfarm waterways; lining channels with grass, rock, concrete, asphalt, or other materials; diversions; special-purpose and detention-type terraces; check dams; drop spillways; chutes; drop inlets; desilting areas or basins; debris barriers and basins; jetties; riprap; deflectors; sloping of channel banks; and the installation of firebreaks, towers, roads, shelters and the provision of equipment for fire prevention and control.

The following criteria for the kinds of land upon which vegetative plantings are to be applied must be met before such plantings can qualify as a land-stabilization measure for the stabilization of critical runoff and sediment-producing areas:

All gullied land and land adjacent thereto (generally land not now suitable for cropland or pasture, mainly Class VIe and VIIe) requiring protection by permanent vegetation and possibly other measures which are necessary to prevent substantial contributions to flood damage and/or siltation from these lands provided that use of

vegetation will be restricted to woodland, hay, and seed harvest or limited grazing, after vegetation is fully established.

2. Waterflow-control measures

Assistance may be provided for waterflow-control measures installed primarily to control damaging waterflows and water-borne sediment affecting groups of landowners, communities, and the general public. These measures are eligible for assistance only when the land-treatment and land-stabilization measures needed to assure their reasonable protection and successful functioning are installed or are in the process of installation, as specified in this handbook (sec. 2).

Waterflow-control measures include, but are not limited to, flood-water-retarding structures; clearing, straightening, and enlarging stream channels; levees and dikes; debris and desilting basins; floodways; floodwater diversions; and mechanical field measures, such as special-purpose and detention-type terraces, diversion dikes, and water spreading, when such measures either alone or in combination with structures are shown to provide a more economical method of reducing damages than direct control by structures alone.

C. Agricultural water management

1. Drainage measures

Assistance for drainage measures may be provided primarily for increasing the efficiency of land use on existing farms or ranches by the rehabilitation and improvement of existing drainage systems or the construction of new drainage systems to serve existing crop and pasture land. Drainage of land not previously or not now used for agricultural production shall be incidental to and not a primary purpose of any such assistance. Assistance will be limited to measures that affect groups of landowners, communities or the general public. Individual landowners and operators may not commonly be expected to install such drainage measures on their own farms or ranches even with forms of assistance supplied directly to them under other national conservation programs. These measures ordinarily require group action for their installation and always require group benefits for their justification.

Drainage measures that serve a group of farms for which assistance will be provided include, but are not limited to, construction or rehabilitation of artificial channels (open drains) or covered (tiled) drains, or the rehabilitation of and improvement of natural channels. The drains may have gravity outlets or may convey drainage water to pumping plants for disposal. These measures will include all parts of the group drainage system including drops, checks, flumes, control gates, manholes, and other appurtenant control and stabilization measures. They will also include installation of pumping plants and appurtenances to provide outlets for gravity drains or to reduce and control accumulations of ground water related to subsurface drainage and salinity problems.

2. Irrigation measures

Assistance for irrigation measures may be provided primarily to make more efficient use of water on land now used for agricultural purposes and to obtain the maximum practical benefits for existing investments in irrigation. Irrigation facilities for land not previously or not now used for agricultural purposes shall be incidental to and not a primary purpose of any development. Assistance will be limited to measures that affect groups of landowners, communities, and the general public. These measures ordinarily require group action for their installation and always require group benefits for their justification.

Irrigation measures that serve a group of landowners for which assistance will be provided include, but are not limited to, diversion dams, wells, pumping plants, sluiceways, canal headworks, canal laterals, and main distribution system pipelines to convey project water to each farm unit. This may include canal lining and lining or sealing existing storage reservoirs. Such irrigation measures also include other works needed to conserve and efficiently use present and potential water supplies and to convey them to individual farms with the least practical loss.

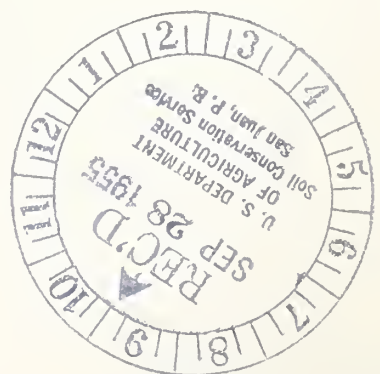
3. Other agricultural water-management measures

Assistance may be provided for other agricultural water-management measures installed for the purpose of providing a more uniform supply and distribution of water for agricultural use by two or more landowners and when such measures are an integral part of a watershed plan. Measures for the stabilization of annual streamflow, increasing the recharge of groundwater reservoirs, and installing community water-distribution systems to provide water for livestock, orchard and crop spraying, and other agricultural uses may be considered in this category, including, but not limited to, well development, brush control, control of salt cedars and other phreatophytes, water-distribution systems, and other related measures.

D. Ineligible measures

Measures that do not provide flood-prevention benefits or benefits attributable to the agricultural phases of the conservation, development, utilization, and disposal of water to two or more landowners are ineligible for financial assistance. The Act does not authorize (1) assistance in the construction cost for providing any capacity in structures for water supply, recreation, or any other purpose not related to flood prevention and (2) assistance in planning or installing structures having a total capacity in excess of 5,000 acre-feet at emergency spillway elevation exclusive of surcharge storage.

In addition, no measures may be installed on Federal land nor may technical assistance, installation services, or financial assistance be provided for installing measures on non-Federal land for (1) the primary purpose of increasing on-site agricultural production or the on-site production of forage and wood products, but this does not preclude measures which are directly associated with structural measures for flood prevention or agricultural water management, (2) water supply or distribution for other than agricultural use, (3) abatement of pollution caused by sewage or industrial wastes, (4) fish and wildlife except as may be necessary to compensate for losses due to the development of the project, (5) land acquisition by the Federal Government or (6) recreation.



SECTION 6

BENEFIT-COST DETERMINATIONS

A. Requirements of the Act and administrative regulations

Section 3 of the Act provides that prior to assisting local organizations in the actual installation of works of improvements, the Secretary is authorized to make such studies as may be necessary for determining the physical and economic soundness of plans for works of improvement, including a determination as to whether benefits exceed costs.

Executive Order No. 10584, prescribing rules and regulations relating to the administration of the Act, vests in the Secretary of Agriculture responsibilities with respect to (1) establishing criteria for the formulation and justification of plans for works of improvement, and (2) establishing engineering and economic standards and objectives, including standards as to the degrees of flood protection, for works of improvement planned and carried out under authority of the Act.

The Department's policy states, "Works of improvement should be based on sound economic analysis. Costs shall be less than assured and identifiable benefits. Benefits are to be assessed with care and are to be clearly creditable to the improvement. Intangible benefits not subject to evaluation should not be used for economic justification. They may appropriately be used as argument but not as a part of economic analysis."

Bureau of the Budget Circular A-47 requires a concise but complete estimate of the benefits and economic costs of a program or project of the type planned under the Act. In addition to comparing the total benefits with total costs it also requires that reports should show separately the particular benefits and economic costs attributable to each purpose of the project.

The benefit-cost provisions of this section are intended to serve a number of interrelated objectives. They provide a guide for the formulation and selection of sound projects. Application of the provisions will show whether benefits are in excess of costs, guide project formulation to maximize net benefits, aid in selecting the least costly alternative means of meeting project needs; serve as one of the bases for establishing priorities among projects, and provide information for determining an equitable sharing of costs.

Monetary evaluations are to be made of measures to the extent necessary to determine the economic justification of installations to be financed in whole or in part from funds appropriated under the Act. Evaluations will be made of all measures, other than land treatment, for which Federal assistance is provided in the cost of installation.

As provided for in the above, the Service will make such studies as may be necessary for formulating projects that are justified on the basis of incremental benefits and costs for each of the separable segments. Land treatment measures are the basic element of any watershed project and shall be considered the nucleus or initial increment for project formulation. All other measures or groups of measures shall be justified for

inclusion in the project on the basis that the land treatment measures scheduled for completion in the watershed work plan are installed and effective. Realistic estimates of the types and quantities of land treatment measures which the local people should install within the agreed upon schedule for completion of the project should be used. After the project has been formulated, benefits may be apportioned to the various separately justified segments of the project in accordance with their accrual to these segments upon installation. The following criteria apply in preparing watershed work plans:

B. Measures not requiring monetary evaluation

1. Land treatment measures

The principal benefits from the land treatment measures for forest and open land will be for the conservation and improvement of the lands on which they will be installed. The Congress has recognized in prior national legislation providing for Federal assistance in soil and water conservation and forest protection and management that such assistance is in the public interest. The Department has found through experience that land treatment measures installed with such assistance produce combined public and private benefits in excess of their costs. Since such other programs do not require a benefit-cost analysis for Federal assistance, and since Federal assistance to be provided under the Act for land treatment measures on land not in Federal ownership shall be limited to technical assistance required to complete planning and application of such measures during the period scheduled for completion of the project, it will not be necessary to determine the relation of benefits to cost for the land treatment measures.

C. Measures requiring monetary evaluation

1. Measures primarily for land stabilization

An evaluation of benefits and costs, both on-site and off-site, will be required for these measures.

2. Waterflow-control measures

An evaluation of benefits and cost will be made for all waterflow-control measures, such as floodwater retarding structures, channel improvements, levees and dikes, desilting basins, and mechanical field measures installed primarily for flood prevention.

3. Water-managment measures

An evaluation of benefits and costs will be made for all agricultural water managment measures, including those for irrigation, drainage, or water supply.

D. Procedures to be used in making benefit-cost determinations

1. Land Stabilization Measures interdependent with land treatment measures

In evaluating land stabilization measures which are interdependent with land treatment measures, it will be necessary to make a monetary evaluation for appropriate subdivisions of the measures and subdivisions of the watershed to determine economic feasibility. To be included as interdependent measures, a significant functional relation between the land stabilization measures and the land treatment measures shall be indicated. Where they are evaluated together it will be necessary to determine the appropriate share of the benefits attributable to the land stabilization measures.

2. Independent measures or groups of measures

Independent measures or interdependent groups of measures such as a group of floodwater retarding structures functioning together as a unit, will be evaluated separately to determine the relation between benefits and costs. These separate comparisons of benefits and costs shall be made for such subdivisions of the measures and such subdivision of the watershed, as are necessary to determine economic feasibility.

Where a system of structures is included in a project, care should be taken to assure that each increment in the system will return benefits at least equal to its cost.

3. Benefits within and outside the watershed

In determining the benefits from measures or groups of measures, an investigation will be made, wherever necessary, of the nature and extent of benefits that may accrue downstream from the watershed. If significant benefits from such measures will result downstream, these benefits should be taken into account in developing economic justification, and for cost-sharing purposes.

4. Planning services, technical assistance, installation services, and other project costs

The cost of planning services and technical assistance will not be included in the benefit-cost analysis.

All other monetary outlays made and goods and services contributed, including installation services by various interests for a project, such as the initial investment costs (often called installation costs), major replacements, and operation and maintenance costs shall be included in the benefit-cost analysis. Any induced costs, such as uncompensated adverse effects caused by construction or operation of the project, whether in goods or services and measurable in monetary terms shall also be included in the benefit-cost analysis.

5. Benefits evaluated in monetary terms

(a) Benefits to be included in the benefit-cost analysis

The benefit-cost analysis of watershed protection and flood prevention measures other than land treatment measures, shall be based on primary monetary benefits.

Under the above definition, the following types of benefits will be included in the monetary benefit-cost analysis:

- (1) Reduction in direct and indirect damages from floodwater and sediment.
- (2) Increases in net income (gross less all associated costs) from changed use of property made possible as a result of reduction in the flood hazard.
- (3) On-site increases in net income from additional production or reduced production costs, on lands on which measures are installed.
- (4) Increase in net income from additional production, or reduced cost of production, of farm products as a result of drainage and irrigation.
- (5) Savings in the cost of water treatment resulting from the reduction of sediment in industrial, municipal, and domestic water supply.
- (6) Other benefits which can be evaluated in monetary terms.

6. Benefits not evaluated in monetary terms

Certain possible benefits, such as increases in the value of recreation, fish and wildlife resources, and other identifiable increases or gains in assets or values, whether in goods, services, or intangibles, may accrue as a result of the project. While these benefits will not be evaluated in monetary terms, they may, however, be described qualitatively and included as an argument for the proposed project in the work plan.

7. Period to be used in project justification, prices and price indexes and interest rates

To compute benefits and costs, the time period to be used shall be (1) a period of 50 years beyond the date on which benefits from the project, or separable parts thereof, will be available to the beneficiaries, or (2) the expected useful economic life of the project or separable parts thereof, whichever is less.

The evaluation period usually shall begin at the completion of the installation stage. For example, if the installation period is 5 years, the evaluation period would extend from the 6th to the 56th year. In this example "instantaneous installation" is assumed as having taken place in the 5th year.

All benefits will be evaluated and shown at their full level after appropriate discounting for lag in accrual.

In evaluating projects or parts thereof to be installed within 5 years, prices current at the time of the analysis will be used for

installation costs and long-range projected prices will be used in evaluating all other costs, including operation and maintenance, and all benefits.

In evaluating projects or parts thereof where the installation period extends beyond 5 years, long-range projected prices will be used for all benefits and all costs, including installation.

Until amended, the price and cost indexes as recommended by the former Bureau of Agricultural Economics in a price pamphlet issued November 1951 revised August 1952, will be used in computing long-term price projections for individual commodities or groups of commodities.

The following interest rates will be used, unless or until modified by the Bureau of the Budget, for discounting and computing average annual equivalent values for benefit-cost analysis: Federal-- $2\frac{1}{2}$ percent; non-Federal Public and Private--the long-term borrowing rate likely to be paid by these groups but not less than the Federal rate.

E. Allocation of Costs

Cost allocation is apportioning project costs among the various purposes served by the project. Cost allocation may be helpful in cost-sharing arrangements for determining amounts to be contributed by private, public, and Federal interests towards the construction, operation, and maintenance of the project.

F. Other Criteria relating to Bureau of the Budget Circular A-47

All other criteria relating to benefit-cost determinations contained in Bureau of the Budget Circular A-47, and not covered here, or not contrary to the Act, applies to work plan preparation under the Act.

G. Definitions

1. Project Costs: The value of goods and services required for establishment, maintenance and operation of project measures.
2. Associated Costs: The value of the goods and services needed, over and above project costs, to make the immediate products of the project available for use or sale.
3. Induced Costs: All uncompensated adverse effects caused by construction or operation of a program or project, whether in goods, services, or intangibles, and whether measurable in monetary or non-monetary terms.
4. Benefits: All identifiable increases or gains in assets or values, whether in goods, services, or intangibles, whether primary or secondary, and whether measurable in monetary or non-monetary terms which, taking account of conditions within and without the project, are properly creditable to that project, and which are net of all costs other than project costs.

5. Primary Benefits: The value of immediate products or services resulting from the measures for which project costs are incurred. Primary benefits of flood prevention may be either direct or indirect. Direct benefits arise from the reduction in damages resulting from the immediate action of floodwater and sediment. Indirect benefits are remaining primary benefits arising from reductions in indirect flood losses, such as costs of rerouting traffic, relief, rehabilitation, and care and protection of property.
6. Community Benefits: The values added over and above the value of the immediate products or services of the project as a result of activities stemming from or induced by the project, initially accruing to the processors or handlers of increased goods produced or used in the project trading area. An example of such benefits would be the increased net return to a cotton gin from processing additional cotton produced by a project. Such benefits are not to be used in the benefit-cost determination but may be considered for cost-sharing purposes. (Sec. 7)

SECTION 7

COST-SHARING CRITERIA

A. REQUIREMENTS

The Act provides that local organizations shall "assume such proportionate share of the cost of installing any works of improvement as may be determined by the Secretary to be equitable in consideration of anticipated benefits from such improvements".

Executive Order 10584 (Section 27--3(e)) gives the Secretary responsibility for "Establishing ... criteria for the sharing of the cost of both structural and land treatment measures which conform with policies established by or at the direction of the President for watershed protection, flood control, irrigation, drainage, water supply and related water-resource development purposes."

The policy of the Secretary of Agriculture states: "On privately-owned lands, financial assistance will be provided only for works of improvement producing direct measurable benefits to groups of landowners, to communities, and to the general public.

"Federal assistance to be provided under this Act for land-treatment measures on land not in Federal ownership shall be limited to technical assistance required to complete the planning and application of such measures during the scheduled period for completion of the project supplemental to other program activities. ****

"On Federal lands the land-treatment measures for flood prevention will be installed, operated, and maintained by the agency administering such land. Funds available under the authority of this Act will be used to install land-treatment measures on Federal lands only to the extent necessary to complete the application of such needed measures provided for in approved work plans during the scheduled period for completion of the project. ****

"Under the Act the local organization will assume all construction costs for providing storage in any structure for purposes other than flood prevention and features related thereto. It is the policy that local organizations will be expected to assume that part of the cost of installing works of improvement, exclusive of Federal costs of technical services such as planning, design, supervision, and economic analysis, which is equal to the ratio of local benefits to total benefits and all construction costs for water distribution and other facilities for purposes other than flood prevention and features related thereto. In addition to such costs as accrue to the Federal Government under the above provisions, the Federal Government may share a portion of the costs otherwise accruing to the local organization when justified in the work plan and the reasons for so doing are set forth in detail. Criteria and procedures for justifying inclusion of such cost shall be established by the Administrator and approved by the Assistant Secretary. ****"

B. DEFINITIONS

1. Program costs

Program costs include all expenditures from appropriations made under authority of the Act and all non-Federal costs incurred directly for the purpose of the program authorized under the Act. Expenditures from appropriations made under authority of other Federal Acts may further the program objectives in a particular watershed but are not considered a part of program costs as such funds were not appropriated for the purpose of the watershed program. Any such costs paid or reimbursed from Federal appropriations made under authority of other Acts will not be considered as non-Federal costs under this program.

2. Planning services

Planning services cover all assistance and services provided for surveys and investigations and preparation of work plans prior to authorization of assistance in works of improvement. Planning services also include costs for collection and analysis of basic data, economic analysis, and river basin coordination studies.

3. Technical assistance

Technical assistance includes assistance provided to landowners and operators, from appropriations made under authority of the Act for the planning and application of land-treatment measures by them on their farms, ranches, and timberlands.

4. Installation services

Installation services cover all services other than planning services and technical assistance. It includes surveys, site investigations, layout, design, preparation of specifications, supervision of construction and related forms of assistance.

5. Land-treatment costs

Land-treatment costs include those incurred (1) from appropriations made under authority of the Act for (a) technical assistance to landowners and operators for planning and applying land-treatment measures on non-Federal land, and (b) for planning and applying land-treatment measures on Federal land, including operation and maintenance during the installation period; and (2) those incurred by landowners and operators for installation (less any ACP financial assistance). These costs are necessary in order to provide for stabilization of soil and water resources on the land, and to assure the most efficient and economical design, operation and maintenance of structural improvements within an agreed upon time schedule. The Federal share of these land-treatment costs might be borne from funds appropriated under authority of other Federal Acts over a longer period of time in the absence of a watershed project.

6. Costs for structural measures

Costs for structural measures are those directly related to the installation, operation, and maintenance of structural works of improvement authorized under the Act. These costs do not include planning services, technical assistance or installation of land-treatment measures. They do include all installation services such as field surveys, design, preparation of specifications, contracting, supervision of construction, etc.; actual construction costs; and the costs of operation and maintenance. Construction costs are the actual contract or force account costs and do not include the costs of installation services, land, easements and rights-of-way, and operation and maintenance.

C. CONSIDERATION OF LAND-TREATMENT COSTS

1. Explanation of land-treatment costs

1. Non-Federal lands.

Although the Act authorizes Federal financial assistance for land-treatment measures (defined in Section 5) at rates that "shall not exceed the rate of assistance for similar practices under existing national programs", it shall be the policy in administering this program that financial assistance for land-treatment measures will not be provided out of appropriations made under authority of this Act.

Financial assistance made available under the Agricultural Conservation Program for soil and water conservation practices is administered at the local level by elected committees in each county under rules and regulations prescribed by the Secretary of Agriculture within the framework of applicable Federal legislation and appropriations. Both the state committee appointed by the Secretary and the elected county committees have considerable latitude in allocation of available funds in accordance with conservation needs. The Service will encourage the allocation of funds in such a way as to provide timely financial assistance for land-treatment measures included in work plans for watersheds approved for installation of works of improvement under the Act.

Additional technical assistance for planning and installation of land-treatment measures will be provided from funds appropriated under the Act only to the extent required by lack of sufficient technical assistance provided under other appropriations.

The need for any additional technical assistance will be determined and justified in the work plan on the following basis. It will be assumed that technical assistance available in the district(s), county (counties), or other geographical area(s) (1) will be continued in at least the same amount as in the fiscal year in which the work plan is completed, (2) will serve a proportional number of farms and ranches, or other operating units, within and outside the watershed boundaries. If the amount

of technical assistance thus expected to be available within the watershed is insufficient to provide required assistance in the installation of remaining needed land-treatment measures within the agreed upon period for project installation, then additional technical assistance may be provided as needed to overcome this deficiency.

This supplementary technical assistance may be scheduled in the work plan for use in that year or those years during the period of project installation which would be most advantageous in consideration of approximately uniform availability of technical assistance under other programs of assistance.

Increases or reductions in technical assistance from other programs may be reflected in amendments to the work plan increasing or decreasing technical assistance from funds appropriated under authority of the Act.

Costs of providing supplementary technical assistance will be shown as a Federal cost. Installation costs to landowners and operators, exclusive of financial assistance provided under ACP, may be shown as a non-Federal cost.

Costs credited to land-treatment measures will include only planning and installation costs.

2. Federal Lands

Explanation: The need for any additional funds from appropriations made under authority of the Act for installation of eligible land-treatment measures on Federal lands will be determined and justified in the work plan on the following basis. It will be assumed that funds available in the unit(s) of Federal land administration for planning and installation of land-treatment measures (1) will be continued in at least the same amount as in the fiscal year in which the work plan is completed, and (2) will be allocated proportionately to installation of land-treatment measures within and outside the watershed boundaries. If the amount of funds thus expected to be available for this purpose within the watershed is insufficient to provide for the installation of remaining needed land-treatment measures within the agreed upon period for project installation, then additional costs for installations needed to overcome this deficiency may be provided for out of appropriations made under authority of the Act.

This supplementary cost of installation may be scheduled in the work plan for use in that year or those years during the period of project installation which would be most advantageous.

Increases or reductions in funds available from other programs may be reflected in amendments to the work plan increasing or decreasing installation costs from funds appropriated under authority of the Act.

Federal costs for operation and maintenance of land-treatment measures, except during the period of installation, will not be included as a Federal share of costs as they will not be borne from appropriations made under authority of the Act.

2. Sharing of land-treatment costs

1. Non-Federal Lands

- a. No Federal financial assistance for installation of land-treatment measures will be provided from appropriations made under authority of the Act.
- b. Additional Federal technical assistance may be provided for planning and installation of eligible land-treatment measures only to the extent required to supplement that available under other programs in order to complete the watershed project within the agreed upon time schedule.

2. Federal Lands

Federal land-managing agencies will install eligible land-treatment measures at Federal expense with funds appropriated under authority of the Act to the extent required to supplement installations that can be made under other programs in order to complete the watershed project within the agreed upon time schedule.

D. CLASSIFICATION OF BENEFITS FROM STRUCTURAL MEASURES

Benefits derived from structural measures installed under the Watershed Protection and Flood Prevention program may be divided into two major classes. Either class of benefits may accrue directly to immediate local beneficiaries or to other beneficiaries and the Federal Government.

Cost-sharing will be determined on the basis of allocation of benefits by classes. Where both classes of benefits accrue from structural works of improvement, sharing of costs will be computed for each class of benefits in the proportion that those benefits have to the total benefits.

Assessment of benefits and apportionment, if any, of costs to specific local beneficiaries will be a responsibility of the local organization. The Federal Government will be concerned only with properly allocating costs to classes of benefits.

1. Class 1 benefits are those resulting from:

- (1) floodwater and sediment damage reduction,
- (2) prevention of the destruction or impairment of productivity of land and water resources, and
- (3) recharging of ground water.

2. Class 2 benefits are those resulting from making land suitable for productive agricultural use or increasing its productive agricultural use by

(1) a. irrigation

b. drainage

c. agricultural water facilities

(2) making possible a greater financial return from property protected against floods and related hazards by virtue of changed use (land enhancement).

3. Explanation of benefits

(1) Class 1 benefits are those stemming from the prevention or reduction of losses. They represent the difference in monetary yields to be expected from land, facilities, and services with and without the works of improvement. They are based on the protection and maintenance of a present or restoration of a former state of resource development and use, with elimination or reduction only of the natural or man-induced factors of excessive runoff and flood flows, excessive soil erosion, and sediment production.

Such benefits result from protection against the effects of climatic events over which man has no control. Such events occur irregularly and their specific dating cannot be forecast more than a few days in advance. Estimation of expected future losses and benefits must be based on probabilities derived from past experience.

(2) Class 2 benefits are those stemming from the development and improvement of land and water resources to increase their productivity and yield above the state achieved by elimination or reduction of losses. Such improvements are achieved in part by the same measures that prevent losses, and also by supplemental irrigation, drainage, and related measures.

Class 2 benefits consist primarily of regular, predictable increases in annual income resulting from utilization or improved use because of protection of natural resources.

In general, Class 2 benefits are of the type that will support amortization of loans for improvements because of the collateral value of and the regular income stemming from such improvements.

(3) Class 1 and 2 benefits may be further subdivided into A and B categories. Benefits in the A category are direct primary benefits which accrue to immediate local beneficiaries. Benefits in the B category are benefits which accrue to other beneficiaries and the Federal Government.

E. DEFINITION OF BENEFICIARIES FROM STRUCTURAL IMPROVEMENTS

1. Local beneficiaries are those whom a given structural improvement will clearly benefit directly and immediately in a significant or major way. The benefits must be such that they can be demonstrated to the satisfaction and conviction of local interests.

Examples of structural improvements and identifiable local beneficiaries include:

- (1) A levee. Local beneficiaries include owners of all productively used or usable land and developments behind the levee.
- (2) Channel cleaning, enlarging or straightening to prevent overflow. Local beneficiaries are owners of property adjacent to the channel on which overflow of floodwaters is minimized or prevented.
- (3) A floodwater-retarding reservoir. Local beneficiaries are owners of property below the dam who receive substantial benefits from its protection. As benefits decrease downstream, a point is reached at which their value is no longer sufficient to encourage a landowner or local community to assume a cost of protection in lieu of incurring the risks of damage. Although no level applicable to all situations can be fixed, it seems likely that immediate beneficiaries would not be inclined to make large contributions to improvements affording less than 50 percent reduction in average annual damages. On the other hand, the national interest justifies contributions to the cost of a much lesser degree of protection as a means of sustaining the Nation's productive resources. For example, a reduction of 10 percent in flood losses may be highly profitable to the Nation as a whole although uneconomic to the individual.
- (4) A drainage improvement. Local beneficiaries are owners of land which substantially benefits by lowering of the water table and more rapid disposal of surface water, thus permitting earlier, more frequent or more profitable use of the land.
- (5) An irrigation improvement. Local beneficiaries are all those supplied with additional or more dependable water supply or with water for the first time as a result of the improvement.
- (6) Other types of agricultural water-management improvement. Local beneficiaries include those who benefit from a community agricultural water facility such as a stream diversion for livestock or a well.

2. Other beneficiaries. Other beneficiaries include those who cannot reasonably be identified and those who receive such small benefits that the cost of surveys necessary to identify them would be an uneconomic operation relative to the total benefits involved. In addition, they include those receiving indirect benefits, community, benefits, owners of lands upon which the reduction in average annual damages is relatively small, and beneficiaries outside the project area.

For example, it is often difficult or impossible to identify immediate local beneficiaries from ground water recharge, eradication of phreatophytes, or similar water conservation measures.

3. Federal beneficiaries. Federal beneficiaries include all lands, properties, services owned or controlled by agencies of the Federal Government which would benefit from structural works of improvement. Such benefits might result from prevention of flood losses to Federal property, protection of Federal reservoirs from silting, increase value of Federal lands by drainage, reduction of Federal costs for maintenance of harbors and navigable waterways, protection or improvement of National parks, monuments, forests, range lands and related resources or developments.

F. TREATMENT OF COSTS FOR STRUCTURAL MEASURES

1. Explanation of Costs

Costs for structural measures are all costs and values related to the installation, operation and maintenance of improvements for flood prevention or the agricultural phases of the conservation, development, utilization and disposal of water.

Initial installation costs include:

(1) Cash Payments or Expenditures

Included are all disbursements on behalf of the project by either the Federal agency, the State, the local organization, or other agencies, groups or individuals. Transfers, reimbursements, donations, tax receipts and all other cash items may be credited in cost-sharing as either Federal or non-Federal, except (1) that the Federal share of the cost shall be exclusively that coming from appropriations made under authority of Public Law 566, and (2) the non-Federal share shall not include costs incurred as a condition of cost-sharing in some other Federal program such as Federal-State-Extension, Clark-McNary, Federal Highway Aid, etc. This provision shall likewise apply to all non-cash contributions of the type listed below.

(2) Value of Labor and Services Provided

Included are all Federal or non-Federal, voluntary or paid technical, administrative, or legal services used in engineering, design, lay-out, administration of contracts, and supervision of construction and the value of labor at prevailing local rates contributed by land-owners or others to the installation of the project improvements. The services or labor must be provided directly for the primary purposes of the project, and will not include such services as those of district supervisors or other organization leaders spent at regularly scheduled meetings of such organizations.

(3) Equipment Rental Value

The rental value of all equipment (including passenger vehicles) provided for direct use in carrying out the project may be credited at prevailing local rental rates.

(4) Value of Material and Supplies

The value of all materials and supplies furnished will be credited at their cost or fair market value, except that trees and other planting materials will be credited at the following costs: (1) cost of production and shipment if paid from funds appropriated under authority of the Act, (2) actual cost if paid from non-Federal funds, (3) costs charged at delivery site if production is from other Federal funds, (4) not creditable if produced with other Federal funds and made available without charge.

(5) Value or cost of land, easements, and rights-of-way, including costs of relocating facilities and settlement of damage claims.

The value of land, easements, or rights-of-way shall be considered either as (a) the actual costs of their acquisition, including purchase costs if incurred, or (b) the value as estimated by the local organization with concurrence of the Service where no purchase is involved. Costs shall also include removal, relocation and replacement of facilities such as bridges, roads, railroads, pipelines, buildings, wells, etc. All of the above costs are creditable in cost-sharing and must be borne from non-Federal funds.

(6) Value or actual cost of water rights

The actual cost of acquiring or the appraised value of an established water right acquired after the Secretary is authorized to assist in works of improvement is creditable as a non-Federal share of the cost.

- (7) Any capital expenditures for protection of public health and preventing loss of, or damages to, recreation, fish and wildlife and mineral resources.

Any expenditures required for these purposes incident to installation of specific works of improvement may be credited as a project cost, but expenditures for facilities to increase recreational values or fish and wildlife resources above their current level are not creditable expenditures.

Total costs for structural improvements include in addition to the above costs:

- (1) the capitalized or present worth value of operation and maintenance of works of improvement during their expected life or period of usefulness, computed at the local public borrowing rate available to the local organizations guaranteeing maintenance at the time of work plan development.

All costs must be estimated in the work plan development period. These estimates will be used as a basis for determining the Federal and non-Federal shares of the cost. The structural installation cost estimates shall include appropriate contingency allowances, which generally shall not be less than 12 percent for any construction job. The agreement on cost-sharing shall be expressed both in dollars and as a percentage. It shall be agreed that the Federal and non-Federal costs shall be reconsidered annually, and the non-Federal share shall be increased or decreased on the percentage basis to reflect any excess costs for which the Federal agency is not responsible or any decreased costs. Cost records shall be maintained by the Federal agencies and local organization during the period of project installation to substantiate their costs.

2. Sharing of costs for structural measures

1. The non-Federal share of the costs for structural measures allocable to all classes of benefits must include the value or cost of (a) land, easements, and rights-of-way on non-Federal lands, (b) water rights, (c) capacity in structures for purposes other than flood prevention and features related thereto, (d) operation and maintenance of measures on non-Federal land and of measures other than land treatment on Federal land to the extent that benefits accrue to non-Federal beneficiaries, and (e) the cost of administering contracts let by other than the Federal Government.
2. The Federal share of costs may include the full value of installation services.
3. The Federal share of costs allocable to Class 1B benefits may be the full costs less the required non-Federal costs itemized under 1, above.
4. The Federal share may include additional costs justified in detail in the work plan.

G. CALCULATION OF COST SHARING

1. Land Treatment Costs

The land treatment costs should be estimated and shown in the Work Plan in the form of Table A.

Table A - Land Treatment Costs

Type of Cost	Federal Cost	Non-Federal Cost	Total Cost
	(Dollars)	(Dollars)	(Dollars)
<u>Non-Federal Lands</u>			
1. Technical assistance	25,000	--	25,000
2. Installation costs ^{1/}	--	250,000	250,000
3. Total	25,000	250,000	275,000
<u>Federal Lands</u>			
4. Installation costs	25,000	--	25,000
5. Operation and maintenance during installation period	2,000	--	2,000
6. Total	27,000	--	27,000
7. Grand Total	52,000	250,000	302,000

^{1/} This cost shall be exclusive of any reimbursement from ACP or other Federal funds.

2. Construction Costs for Structural Measures

1. Benefits and allocated construction costs for structural measures will be determined and shown in the form of Tables B and C in the Work Plan. As a partial basis for cost sharing, it is necessary to first allocate benefits by purposes to the four classes of benefits as described on page 6. This allocation will provide a percentage figure which can then be applied to total construction costs for each purpose by types of beneficiaries. For an example, see Table B, Steps A and B.

Table B - Distribution of Average Annual Benefits and Allocation of Construction Costs
by Purposes and by Class of Benefits

Step A		Distribution of Average Annual Benefits							
Class of Benefits	Purpose								
	Flood Prevention (Dollars)	Flood Prevention (Percent)	Drainage (Dollars)	Drainage (Percent)	Irrigation (Dollars)	Irrigation (Percent)	Other Agricultural Water Management (Dollars)	Other Agricultural Water Management (Percent)	Total (Dollars)
Class 1A Benefits	60,000	60	--	--	--	--	--	--	60,000
Class 1B Benefits	20,000	20	--	--	--	--	--	--	20,000
Class 2A Benefits	20,000	20	40,000	80	8,000	80	5,000	100	73,000
Class 2B Benefits	--	-	10,000	20	2,000	20	--	--	12,000
Total	100,000	100	50,000	100	10,000	100	5,000	100	165,000
Step B		Allocation of Construction Costs							
Class of Benefits									
	Flood Prevention (Percent)	Flood Prevention (Dollars)	Drainage (Percent)	Drainage (Dollars)	Irrigation (Percent)	Irrigation (Dollars)	Other Agricultural Water Management (Percent)	Other Agricultural Water Management (Dollars)	Total (Dollars)
Class 1A Benefits	60	300,000	--	--	--	--	--	--	300,000
Class 1B Benefits	20	100,000	--	--	--	--	--	--	100,000
Class 2A Benefits	20	100,000	80	40,000	80	80,000	100	25,000	245,000
Class 2B Benefits	--	--	20	10,000	20	20,000	--	--	30,000
Total	100	500,000	100	50,000	100	100,000	100	25,000	675,000

Table C - Benefits and Allocated Construction Costs

Class of Benefits	Benefits		Allocated Construction Costs	
	(Dollars)	(Percent)	(Dollars)	(Percent)
1. Class 1A	60,000	36	300,000	44
2. Class 1B	20,000	12	100,000	15
3. Subtotal - Class 1	80,000	48	400,000	59
4. Class 2A	73,000	44	245,000	36
5. Class 2B	12,000	8	30,000	5
6. Subtotal - Class 2	85,000	52	275,000	41
7. Total	165,000	100	675,000	100

2. Required non-Federal costs will be determined and shown in the form of Table D in the Work Plan.

Table D - Required non-Federal Costs

Type of Cost	Cost or Appraised Value
	(Dollars)
1. Land, easements and rights-of-way	70,000
2. Water rights <u>1/</u>	5,000
3. Capacity and facilities for its use on or at the structure for purposes other than flood prevention and features related thereto	50,000
4. Capitalized value of operation and maintenance during expected life of improvements <u>2/</u>	150,000
5. Cost of administering contracts	5,000
6. Total	280,000

1/ Only those water rights acquired in connection with specific project improvements may be included.

2/ To be capitalized at the estimated borrowing rate of the organization(s) guaranteeing operation and maintenance.

3. The basic Federal contribution may include the cost or value of installation services including assistance after project authorization in surveys, site investigation, layout, design, preparation of specifications and supervision of construction. This cost must include not only direct project costs, but also apportioned agency costs above the project level in accordance with existing Federal law and regulation. The total required cost or value of installation services, including apportioned non-Federal costs above the project level, should be determined and shown in the form of Table E in the Work Plan.

Table E - Installation Services

Agency	Cost	Total (Dollars)
Soil Conservation Service	200,000	
Forest Service	25,000	
Other		
Total		225,000

3. Adjustment of Costs

Class 1A and 2 Benefits

The Administrator has been delegated responsibility for establishing criteria and procedures for justifying inclusion of any Federal costs allocated to Class 1A and 2 benefits over and above the value of installation services.

If the local organization considers that the non-Federal costs for structural measures as shown in Item 9, Table G, is inequitable, a justification for assumption by the Federal Government of a part of the construction cost allocable to Class 1A and 2 benefits may be proposed on the basis described below, provided that the proposed Federal share of the cost for each type of works of improvement, such as flood prevention, irrigation or drainage does not exceed the Federal contribution that would be available for similar measures under other project-type programs specifically authorized by Congress or approved by the Bureau of the Budget.

Proposals by the sponsoring local organization for a sharing by the Federal Government of construction costs allocated to Class 1A and 2 benefits must be based on a detailed explanation of the reasons therefor. Such adjustment proposals by the local organization will be incorporated in the tentative work plan, but it should be understood that they do not imply acceptance by the Administrator, the Secretary, the President or the Congress.

Local organizations may wish to consider one or more of the following conditions as a basis for requesting assumption by the Federal Government of a share of the construction costs of structural measures allocable to Class 1A and 2 benefits:

- (1) that as a result of the recent prior installation of part of the needed structural improvements wholly or largely without Federal assistance, the Federal Government should share a part of the remaining cost of installation of improvements;
- (2) that as a result of the large recent prior cost or expected large future cost during the period of project installation for application of land treatment measures (deducting any Federal financial assistance under ACP or other programs) the Federal Government should bear a share of the construction costs;
- (3) that as a result of deteriorated watershed conditions and other economic factors, local organizations even with all available non-Federal aid do not have the financial ability or credit needed to carry the share of the costs imposed by the foregoing cost-sharing provisions;
- (4) that to the extent that Class 2 benefits accrue to the community and the general public, the Federal Government should bear a share of the construction costs allocable to such benefits;
- (5) that the local organizations will bear a part of the costs of installation services, and as a result the Federal Government should share an equivalent amount of construction costs;
- (6) that assistance provided under the Act for specific classes of improvements should be compatible to the fullest practicable extent with the value of assistance currently provided under other Federal programs for similar classes of improvements to the end that various Federal assistance programs shall not offer competitive advantages one over the other;
- (7) that cost-sharing under this program should be compatible with any current policies established by or at the direction of the President; and
- (8) other pertinent localized reasons.

The amount of adjustment in costs proposed for each reason as described in detail in the Work Plan should be itemized in the form of Table F in the Work Plan.

Table F - Proposed Adjustment in Federal and non-Federal Costs

Reason for Adjustment	Transfer from Federal to non-Federal	Transfer from non- Federal to Federal
	(Dollars)	(Dollars)
1.		
2.		
3.		
4.		
5.		
Total		

Class 1B Benefits

The costs allocable to Class 1B benefits will ordinarily be a part of the Federal Government's share of the costs. However, if such costs constitute the major part of costs of structural measures, the local organization will be expected to justify any lack of participation in the sharing of costs beyond those required under Item 2, page 13.

4. Summary of Proposed Cost-Sharing

The proposed cost-sharing shall be shown in the Work Plan in the form of Table G.

Table G - Proposed Cost-Sharing

Type of Costs	Federal Cost (Dollars)	Non-Federal Cost (Dollars)	Total Cost (Dollars)
<u>Costs for Structural Measures</u>			
1. Required non-Federal Costs (Item 6, Table D)	xxxxxx	280,000	280,000
2. Installation services (Table E)	225,000	xxxxxx	225,000
3. Subtotal (Items 1 plus 2) Allocation of Construction Costs	225,000	280,000	505,000
4. Costs allocated to Class 1A benefits (Item 1, Table C)	xxxxxx	300,000	300,000
5. Costs allocated to Class 1B benefits (Item 2, Table C)	100,000	xxxxxx	100,000
6. Costs allocated to Class 2 benefits (Item 6, Table C)	xxxxxx	275,000	275,000
7. Subtotal (Items 4 plus 5 plus 6)	100,000	575,000	675,000
Recommend Adjustments of Construction Costs			
8. Increase or decrease of Federal Cost (Item 5, Table F)			
9. Increase or decrease of non- Federal Cost (Item 5, Table F)			
10. Subtotal (Items 8 plus 9)			
11. Total Cost Sharing for Structural Measures (Items 3 plus 7 plus or minus 10)			
<u>Costs for Land Treatment Measures</u>			
12. Non-Federal lands (Item 3, Table A)	25,000	250,000	275,000
13. Federal lands (Item 6, Table A)	27,000	xxxxxx	27,000
14. Subtotal (Items 12 plus 13)	52,000	250,000	302,000
15. Grand Total Project Cost-Sharing (Items 11 plus 14)			

H. SUMMARY OF COST-SHARING REQUIREMENTS

1. Cost-sharing for each watershed project will be computed and negotiated consistent with policies established by the Secretary of Agriculture.
2. The aggregate non-Federal share of the cost of watershed projects under the provisions of this Act throughout the Nation should be at least 50 percent. Therefore, cost-sharing on each watershed project should be considered with cognizance of this principle.
3. Cost-sharing in individual watershed projects will be based on the determination of the kinds and amounts of various benefits and the degree of their identification with local beneficiaries.
4. Local beneficiaries will be expected to pay for the construction costs allocable to clearly identifiable benefits that accrue directly to them.
5. Local organizations or landowners and operators will be required to bear the cost of:
 - (a) Land easements and rights-of-way on non-Federal land
 - (b) Necessary water rights
 - (c) Capacity in structures for purposes other than flood prevention and features related thereto
 - (d) Operation and maintenance of works of improvement on non-Federal land and of works of improvement other than land-treatment measures on Federal land to the extent that benefits accrue to non-Federal beneficiaries
 - (e) Administration of contracts let by other than the Federal Government
 - (f) Installation of land-treatment measures on non-Federal land.
6. Local organizations will be expected to bear:
 - (a) that part of the cost of constructing or installing structural works of improvement, exclusive of installation services, which is equal to the ratio of local benefits to total benefits, and
 - (b) all construction costs for water distribution and other facilities for purposes other than flood prevention and features related thereto.
7. The Federal Government will bear the cost of:
 - (a) Planning services
 - (b) Technical assistance
 - (c) Installation services
 - (d) Installation of land treatment measures on Federal land, including operation and maintenance during the installation period.

- (e) That part of the construction cost of structural works of improvement for flood prevention which is equal to the ratio of non-local benefits (allocable to unidentifiable and Federal beneficiaries) to total benefits.

8. The Federal Government may share a portion of the costs otherwise accruing to the local organization under Item (6) above provided that:

- (a) such sharing of costs is justified in detail in the work plan wherein the reasons for doing so are set forth in detail, and
- (b) the proposed Federal share of the cost for each type of works of improvement, such as flood prevention, irrigation or drainage does not exceed the Federal contribution that would be available for similar measures under other project-type programs specifically authorized by Congress or approved by the Bureau of ~~the~~ Budget.

SECTION 8

COORDINATION WITH PROGRAMS OF OTHER FEDERAL AGENCIES RIVER BASIN PLANNING

Section 6 of the Act provides specific authority for the Secretary of Agriculture, in cooperation with other Federal agencies and with States and local agencies, to make investigations and surveys of the watersheds of rivers and other waterways. The authority may be exercised upon the initiation of this Department or may be utilized as the basis for participation in such activities cooperatively initiated with other agencies or initiated by other agencies.

Initiation of or participation in any such investigation and survey will be undertaken only after appropriate understandings have been reached in Washington, through the facilities of the Inter-Agency Committee on Water Resources or otherwise, with representatives of other Departments or agencies that may be concerned as to the objectives, nature and scope of the investigation and survey; after determination of the kind and extent of participation by this Department and methods of financing; and after the field has been advised of its responsibilities in these regards.

Department policy calls for work undertaken and performed under the provisions of the Act to be to the fullest possible extent in harmony with the related work of other Federal, State and local agencies.

Executive Order 10584 provides that the Secretary of Agriculture may transmit plans for installation of works of improvement to the Congress through the President only if he is satisfied that such works constitute needed and harmonious elements in the comprehensive development of the river sub-basin or river basin involved.

In the watershed of a river basin or sub-basin where an investigation and survey of the water and related land resources has not been made, each watershed work plan shall indicate whether or not, in the judgment of those preparing the work plan, the works of improvement constitute needed and harmonious elements in a logical comprehensive development of the river basin or sub-basin in which the small watershed is located together with the reasons therefor. This will be a judgment determination based upon available data and general information about the basin or sub-basin involved.

In the watershed of a river basin or sub-basin where an investigation and survey of the water and related land resources in which this Department participated under other authority has been completed, and upon which a report has been made that is not mutually acceptable to this Department and other concerned Federal agencies, each watershed work plan shall indicate whether or not, in the judgment of those preparing the work plan, the works of improvement constitute needed and harmonious elements in a logical comprehensive development of the river basin or sub-basin in which the small watershed is located together with the reasons therefor. This will be a judgment determination based upon available data and general information about the basin or sub-basin involved.

In the watershed of a river basin or sub-basin where an investigation and survey is undertaken and participated in by this Department under the provisions

of Section 6 of the Act and a report thereon is made that is mutually acceptable to this Department and other concerned Federal agencies, the Service will assist the sponsoring local organization(s) in developing watershed work plans that are harmonious elements with the coordinated plan presented in the report. However, the Act does not require such investigations and surveys to be undertaken for the sole purpose of satisfying the requirements of Department policy and Executive Order 10584 for any specific project watershed for which a plan for works of improvement is prepared.

In the watershed of a river basin or sub-basin where an investigation and survey of the water and related land resources in which this Department participated under other authority has been completed, and that is mutually acceptable to this Department and other concerned Federal agencies, the Service will assist the sponsoring local organization(s) in developing watershed work plans that are harmonious elements with the coordinated plan presented in the report.

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SECTION 9

COLLECTION AND ANALYSIS OF BASIC DATA

Executive Order No. 10584, Section 6, Basic Data, states, "In the utilization of existing basic physical and economic data, and in the acquisition of additional basic data required for planning, design, construction, operation and evaluation of works of improvement authorized under the Act, the Department of Agriculture shall be assisted by the principal basic-data collection agencies, including the Geological Survey in the Department of the Interior and the Weather Bureau in the Department of Commerce. The basic-data collection agencies shall assist and cooperate with the Department of Agriculture with respect to the following:

1. Provision of pertinent information in the preliminary planning of works of improvement.
2. Collaboration in planning programs of hydrologic-data collection in the project areas, in the selection of station sites and installation of equipment for collecting hydrologic data, and in the collection of such data.
3. Collaboration in the analysis and interpretation of hydrologic data collected specifically for projects initiated under the Act, and of relevant data which may contribute to an analysis of the effects of such projects."

Policy of the Secretary for the administration of the Watershed Protection and Flood Prevention Act (Public Law 566) includes the following statement: "In preparation and execution of plans for works of improvement, fullest utilization is to be made of all available basic data pertinent to such improvements including geodetic, climatic, hydrologic, topographic, geologic, soils, land use and vegetal cover conditions. Such data will be utilized where applicable from whatever source it is available.

"* * * * *

"All appropriate agencies of the Department of Agriculture, and it is expected all State agencies, will make available to local organizations to the fullest practicable extent and commensurate with their regular responsibilities such technical assistance and information necessary to development of work plans, installation of works of improvement, and application of land treatment measures."

Service Policy and Procedures. The Service will initiate studies, make investigations, and collect and analyze data in selected watersheds where such information is pertinent to and essential for the planning of watersheds in the general area upon which applications for planning have been received under provisions of the Act.

In carrying out the Service's obligation to furnish technical assistance and information necessary for development of work plans, installation of works of improvement and application of land-treatment measures, the following studies, investigations and collection of basic data may be initiated and carried out:

1. Inventory of physical and economic watershed conditions, including erosion, plant cover, soil, sedimentation, hydrologic, geologic, and land treatment and structural measures.
2. Determination of the effects of various combinations of watershed conditions on the hydrologic characteristics, erosion, sedimentation, and their economic significance.
3. Establishment of measuring devices in selected watersheds in cooperation with the Weather Bureau, the U. S. Geological Survey and others to collect data as required for items 1 and 2 above.
4. Interpret, analyze and put in usable report form the information obtained as a result of the studies and data collection. Such information will be used for planning purposes on watersheds where applicable.

The State Conservationist, with the assistance of the Engineering and Watershed Planning Unit, should review periodically the basic data and information being used in the work plan development on watersheds in each general problem area in the State. These reviews will be for the purpose of determining the adequacy of basic data and planning information in meeting Service technical standards as contained in SCS technical handbooks for watersheds on which applications for planning assistance have been received. In addition, the State Conservationist should review the needs for basic data with other agencies participating in the development of watershed work plans. As a result of the reviews, requests may be made to the Administrator for approval to initiate studies, obtain information, or collect basic data essential for planning and installing watershed projects consistent with good agricultural, engineering, and economic standards.

The request for approval of initiation of special studies to provide additional information for watershed planning and the installation of measures should be accompanied by a summarized statement (3 or 4 pages) giving pertinent information such as:

1. Location and size of watershed or area.
2. Need, type and magnitude of study to be undertaken.
3. Expected results to be obtained.
4. Cost of the studies.
5. Facilities for carrying out the studies including proposed assistance to be provided by other agencies.

This summarized statement will provide a basis for coordinating the studies of the various states on a national basis to prevent overlapping and duplication of effort.

If it seems feasible to proceed with the studies and funds are available, the Administrator will advise the State Conservationist concerned to proceed with the preparation of a detailed plan which will be submitted to the Washington office for approval. The initiation of the special studies will be contingent

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on approval of the plan by the Administrator. This detailed plan is desirable from the standpoint of achieving as great a degree of uniformity and standardization of objectives, procedures, analysis, interpretation, and publication of information as a wide diversity of conditions will permit.

The detailed plan should describe the following:

1. Scope
2. Objectives
3. Program to be initiated including period of study
4. Data collection
5. Instrumentation
6. Method of collection of economic, hydrologic, sedimentation and other types of information
7. Provision for collection, analysis, interpretation, and report preparation of information and results
8. Cooperation and assistance of other agencies
9. Source of funds and costs

The responsibilities for carrying out these special studies shall be as follows:

The State Conservationist is responsible for preparing the reports to the Administrator as discussed below. Upon approval of special studies by the Administrator the State Conservationists are responsible for the initiation of the studies, the collection, recording, analysis, interpretation and the reporting of information. State Conservationists will look to the Head, Engineering and Watershed Planning Unit and the Washington Field Plant Technologist for assistance in preparing the special study reports and in the technical analysis and interpretation of data. The State Conservationist will designate a member of the State Program Staff to be responsible for planning and coordinating the studies and for preparing the reports. This designated staff member shall make arrangements with (1) work unit personnel to furnish technical assistance, and to obtain and maintain records, and (2) the Head of the Engineering and Watershed Planning Unit and the Washington Field Plant Technologist for technical guidance in preparing the detailed plan and in the analysis and interpretation of data.

Funds for the Special Studies. Additional funds will be allocated to the States concerned for approved studies based upon cost estimates submitted by the State Conservationist in the detailed plan. After initiation of the studies, revised yearly estimates are to be provided to the Washington office at the same time other estimated watershed program costs are provided.

Assistance of Agricultural Research Service, Forest Service, and Other Departmental Agencies. The special studies previously described may require the collection, analysis, and interpretation of basic economic data for use in

planning watersheds upon which applications for planning have been received under the provisions of the Act. The services of other agencies, particularly the Agricultural Research Service, may be used to achieve the objectives of the studies. Field request for assistance by the State Conservationist should be through the appropriate Engineering and Watershed Planning Unit of the Soil Conservation Service and will be transmitted to the Washington office of the Soil Conservation Service. The Soil Conservation Service Washington office will arrange with Agricultural Research Service for personnel assignments as required, based on the detailed plan of investigations.

A memorandum of understanding between the Soil Conservation Service and the Agricultural Research Service, dated March 10, 1955, sets forth procedures for working arrangements, transfer of funds, and other details concerning Agricultural Research Service's assistance in connection with the economic investigations.

The Forest Service will also participate in these special studies where forest, associated range, and wild lands are included. The State Conservationist will make appropriate arrangements for the needed Forest Service participation and will provide for transfer of funds and other details through the Washington office.

Assistance of U. S. Geological Survey and the Weather Bureau. The implementation of special studies may require the installation of rain gages, stream gages, and other instrumentation. The services of the data gathering agencies should be used where necessary to achieve the objectives of the studies, including the collection, analysis, and interpretation of basic data. Several memoranda of understanding between the Soil Conservation Service, Weather Bureau, and the U. S. Geological Survey are already established.

1. Memorandum of June 4, 1954, to State Conservationists and Heads of Engineering and Watershed Planning Units, Watershed Protection Program---cooperative agreements with U. S. Geological Survey with attachments.

Under this agreement and as applicable to the program under the Act, "The Soil Conservation Service will reimburse the Geological Survey for cost of instruments, constructions, installations and services in accordance with previously or hereinafter agreed to amounts. The number of such instruments and the construction and services to be performed by the survey and the amount to be paid by the Service shall be as mutually agreed upon between the State Conservationist of the Soil Conservation Service and the local District Supervisor of the Geological Survey."

"It is further understood that all property, structures, and materials contributed or paid for directly by the Soil Conservation Service shall remain the property of the Service unless mutual agreement is otherwise reached for the transfer of such property, structures, or materials to the Survey."

2. Memorandum of Agreement, signed December 29, 1954, with the U. S. Geological Survey establishing working arrangements for the compilation and collection of basic data.

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3. Memorandum of Agreement, signed December 28, 1954, with the Weather Bureau establishing working arrangements for the compilation and collection of basic data.
4. The Weather Bureau has asked that all requests for instruments, services, forms, and inspection be consolidated by the Washington office and referred to them along with an advanced working fund.

To comply with this arrangement State Conservationists should refer all requests of this nature which cannot be handled locally to the Administrator.

SECTION 10

ASSISTANCE IN INSTALLATION OF MEASURES ON NON-FEDERAL LANDS

Financial and technical assistance in the installation of measures on non-Federal lands under the authority of the Act will be made available during the installation period through the sponsoring local organization(s) under the following conditions:

1. Land Treatment Measures

- A. The Soil Conservation Service will provide, except as noted in B(1), the technical assistance necessary to enable landowners to install the land treatment measures which are included in the watershed work plan. Such technical assistance shall include inventory information on the soil, water, and plant resources, interpretation of this information in the light of prevailing farming and ranching practices and other factors, and specifications, costs, and recommendations on:
- (1) The suitability of all lands for cultivation, grazing, woodland or other uses and the capability of such lands for adapted crops.
 - (2) Such conservation practices as terraces, dams, diversions, waterways, contour farming, strip cropping, and the establishment of green manure cover crops, and other vegetation necessary to protect the soil from wind and water erosion and restore, improve, and maintain soil productivity.
 - (3) Needs, suitable location, and design information for irrigation systems, chiseling, sub-soiling and pitting, contour furrows, water spreading systems, drainage, wells, ponds, and other improvements required to provide and conserve water for cultivated crops, livestock, and forage production.
 - (4) The condition of grazing lands, stocking rates, areas requiring reseeding, adapted species and methods of establishment, methods for weed and brush control, methods for erosion control, and range improvement and management systems and practices necessary to restore and improve range and permanent pasture. (except as provided in B(2)).
 - (5) Those woodland conservation practices that landowners and operators include in their farm and ranch conservation plans for soil and water conservation purposes and can apply with generalized technical assistance.
- B. (1) The Forest Service will provide the specialized technical assistance without which landowners and operators are unable to apply needed forestry practices. This assistance will usually be made available through the State forestry agency within the pattern of established cooperative

forestry programs, including forest protection, distribution of planting stock, and specialized technical assistance in forest management.

- (2) The Forest Service will provide with respect to rangelands within national forest boundaries and rangelands adjacent to national forests which are administered in conjunction with such forests under formal agreement with the owner or lessee, the basic data and information relating to condition of grazing lands, stocking rates, areas requiring reseeding, adapted species and methods of establishment, methods for rodent, weed and fire prevention and control, range improvements, and management systems, and practices necessary to restore and improve the range.
- C. Assistance to woodland owners and operators indicated under A(5) and B(1) above will be furnished in accordance with the desires of local sponsoring groups, consistent with understandings reached at the local level and the policies established in Title 9, USDA Administrative Regulations and the memorandum on Responsibilities on Brush, Forest and Range Lands, signed by the Administrator, SCS and the Chief, Forest Service in September 1954.
 - D. The Soil Conservation Service and the Forest Service are jointly responsible for developing the interest of all landowners and operators in woodlands by presenting information on land capability and suitability for tree crops, species suited to their land, rates of tree growth to be expected on their kinds of soil, labor requirements for proper woodland management, income potential from their wood crops and multiple use values of their woodland.

2. Structural Measures

- A. The Soil Conservation Service will provide necessary installation services to the local organization(s) to plan, design, and supervise construction of structural measures on all non-Federal lands except as provided in the following section.
- B. The Forest Service will provide installation services and financial assistance to plan, design, and install such facilities and measures for the protection of forest and brush-covered lands from fire as are incorporated in the approved watershed work plan. Such facilities and measures may be provided to the extent necessary to bring the present fire protection level up to the current standards of protection. Standards of protection are to be considered from the standpoint of watershed protection requirements.
- C. Financial assistance will be provided to the local organization(s) for the Federal share of installing specific structural measures set forth in the watershed work plan. The extent of financial assistance will be in accordance with cost-sharing requirements set forth in section 7 and as agreed upon by the Administrator, SCS, and the local organization(s).

SECTION 11

PLANNING AND INSTALLATION OF MEASURES ON FEDERAL LANDS

The Act authorizes the Secretary of Agriculture to obtain the cooperation and assistance of other Federal agencies in preparing and carrying out plans and for the installation of works of improvement on Federal lands.

Executive Order 10584 makes the Secretary of Agriculture responsible for planning and installing works of improvement on lands under his jurisdiction and for arranging for the participation of other Federal agencies in the planning and installation of works of improvement on lands under their jurisdiction. It also provides that recommendations of the Secretary of the Interior for necessary work on lands under his jurisdiction shall be submitted as an integral part of the plans of the Department of Agriculture for works of improvement and that arrangements for construction, operation, and maintenance of works of improvement on lands under the jurisdiction of the Secretary of the Interior shall be mutually satisfactory to the Secretary of Agriculture and the Secretary of the Interior.

Department of Agriculture policy provides that the agency administering the lands will be responsible for installing, operating, and maintaining any land-treatment measures installed on Federal lands for flood prevention purposes; that funds available under the authority of the Act may be used to install land-treatment measures on Federal lands only to the extent necessary to complete the application of such needed measures provided for in approved work plans during the scheduled period for completion of any project; that the cost of installing, operating and maintaining other works of improvement on Federal land will be shared by the agency administering such land and the sponsoring local organization(s) in consideration of the estimated benefits that will accrue to Federal and non-Federal land; and that, after the installation period, the Federal share of the cost of operation, maintenance, and management of improvements on Federal lands shall be the responsibility of the Federal agency responsible for the management of such land. During the period of installation, funds made available under the Act may be used for operation and maintenance. After the installation period only funds available under other authorities than the Act may be used for those purposes.

Plans for works of improvement will be prepared on a watershed basis and, where possible, will cover all lands within a watershed regardless of ownership. Work plans will provide for the installation of works of improvement on Federal lands as well as on other lands.

The State Conservationist responsible for preparation of a work plan for any watershed that includes Federal land will be responsible for arranging with the appropriate field representative of each Federal agency whose land is included in the watershed to assist in preparing the work plan. To the extent that such agencies do not have funds available for providing such assistance, they may be provided by the State Conservationist, under authority of section 601 of the Economy Act, from planning funds available to him.

Works of improvement included in a work plan for installation on Federal land will be those that are mutually acceptable to the Federal agency responsible for administering the land, to the sponsoring local organization(s) to the extent that non-Federal interests may be involved, and to the Soil Conservation Service. They may include measures to maintain in a stable and productive condition Federal lands under lease or permit to local users.

Works of improvement will be installed on Federal land by the agency responsible for the administration of the land where the primary benefit accrues to the Federal land. Structural measures installed on Federal land, but of primary benefit to private landowners, shall be installed under arrangements mutually agreeable to the sponsoring local organization and the land management agency. Each of the parties will be responsible for its respective share of the installation, operation and maintenance costs.

The State Conservationist will be responsible for arranging, with the designated field representative of each Federal agency whose land is included in the watershed, the scheduling of installation of measures on Federal lands. This will include all aspects of coordination, including budgetary.

SECTION 12

FARM AND RANCH PLANNING IN WATERSHED PROJECTS

The Service will coordinate structural works of improvement in a watershed project with the planning and application of land treatment measures on individual farms and ranches. The planning and application of conservation measures should progress over all of a watershed as rapidly as resources permit, and should be of such intensity and scope as to give adequate protection to watershed lands and structural works of improvement. In many instances it may be necessary to revise completed conservation plans to integrate them with the watershed plan.

Administrator's Memorandum SCS-23, dated April 15, 1954, contains Service policies in respect to conservation farm and ranch planning. Those policies apply to all Service assistance in planning land treatment programs. The techniques of planning used by farm and ranch planners in assisting local people are the same whether they are used in connection with a watershed program or not.

When a watershed project has been approved by the Administrator, the following actions should be taken in respect to farm and ranch conservation planning if they have not already been provided for:

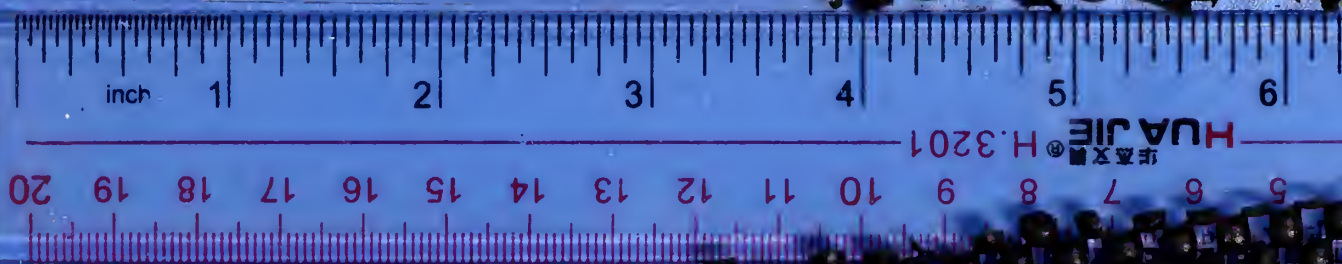
1. After public announcements of approval of the project, emphasize the land treatment called for in the watershed work plan.
2. Identify the professional and lay leaders concerned with the watershed. Arrange for contacts to be made with all local leaders who can help in carrying out the work plan. See that the leaders thoroughly understand the plan and can explain it satisfactorily to others, including the reasons why it is necessary to carry out the improvements. Schedule conservation tours and other educational meetings needed to inform local people about the project.
3. Consideration may be given to assisting the sponsoring local organization(s) in the preparation of a brochure of the watershed plan, explaining all features of it including the responsibilities of local people and the benefits they may anticipate from it. Arrange, through the local leaders, for distribution of this brochure to all the people in the watershed.
4. Arrange for additional surveys for soils, site and condition of vegetation on all land in the watershed for farm and ranch planning.
5. Through local leaders, arrange schedules for farm or ranch conservation planning. Correlate with construction schedules by sub-watersheds or other units.
6. Through the local sponsoring groups, arrange for scheduling application work. These schedules should give high priority to measures needed to protect works of improvement.
7. Arrange for regular reports on progress through the newspapers, radio and other means of public information.

8. Through the local sponsoring groups, arrange for needed conservation materials to be made available.
9. Arrange for adequate photographic coverage of "before" and "after" conditions.
10. Collect and prepare for use suitable research and other data, and local experience relating to costs of applying land treatment measures and the probable returns from them. Use this information freely in public informational programs. Supply such data to local leaders who can use it in contacts with land owners and operators in the watersheds.
11. Encourage periodic meetings of sponsoring groups and local leaders to appraise progress, discuss difficulties encountered and determine the best solutions to problems encountered. Remember, this is the local people's program and they should be expected to take appropriate action to assure its success throughout all phases of planning, application and maintenance.

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K. ADMINISTERING OF CONTRACT

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L. ACCEPTANCE OF WORK AND FINAL **PAYMENT**

M. FISCAL REVIEW

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A. CONTRACTS

1. General Statement

Under The Act, the Secretary of Agriculture is authorized to assist local organizations in developing plans and specifications and preparing contracts for construction and to participate in the installation of such works of improvement in accordance with the watershed work plan. The Secretary has delegated these functions to the Soil Conservation Service. (See Par. C.1.)

2. In cooperating with State and local agencies pursuant to carrying out the objectives for the Watershed Protection and Flood Prevention Act, it is necessary that certain designated rules, standards, and policies be followed. Accordingly, as related to contracting, the authorities and procedures set forth herein, together with those in the Administrative Services Division Handbook which are incorporated by reference shall govern the activities of the Service.
3. When it has been determined by the sponsoring local organization to proceed with a work of improvement called for in the watershed work plan, and prior to development of detailed engineering plans and specifications for the work of improvement, all parties participating in the work of improvement must satisfy each other, in writing, that the estimated amount of funds to be provided by the various participating agencies are in hand or forthcoming. (See also cooperative agreement, paragraph J4)

B. METHODS OF DOING CONSTRUCTION WORK

1. Equipment Rental Contracts

Equipment rentals are distinguished from construction contracts by the Comptroller General as follows:

"Contracts for rental of equipment with operating personnel are not contracts 'for construction, alteration, and/or repair * * * * of public works' ----- even though the equipment may be used in connection with the construction of 'public buildings' or 'public works'."

This type of contract should be used only when a formal construction contract is impractical. It may not carry beyond the period for which an appropriation is available, unless statutory authority to contract in advance of appropriation availability exists. It should not encompass a specific job. That is, it should cover an approximate number of hours for equipment at a designated location. They are considered "purchase contracts" and delegated field authority is, therefore, limited to \$10,000. Special care should be exercised in the close supervision of this type contract.

2. Use of Force Account

As a general rule, Force Account operations are adapted only to small jobs, simple in scope and character, or to certain types of jobs that are difficult to evaluate because of the problems involved in making complete investigations.

Where the Service agrees to the installation of the works of improvement by force account, through the use of the local organization's facilities, the agreement may commit the Soil Conservation Service to make payments to such organization for accepted segments of the work where the contracting local organization awards a contract for the construction. This force account installation procedure may only be followed with the prior approval of the Administrator of the Soil Conservation Service and only in those cases where the local organization is assuming a substantial share of the total cost.

Insofar as inspection is concerned, careful supervision by competent engineers must be maintained at all times irrespective of how the construction is carried out.

3. Formal Construction Contracts

The practice of contracting with the lowest qualified bidder to perform a complete job in accordance with prescribed plans and specifications has long been followed by the Government. Under this method bids are requested from prospective bidders through issuance of formal invitations to bid. Sealed responses are opened at a designated time and place and subsequent award made to the lowest responsive qualified bidder.

In recommending construction procedures, it should be kept in mind that the contract system generally affords the best and most efficient method for carrying out practically all classes of construction work. Under special conditions, as pointed out above, where the work to be done is small in scope, simple, or of a nature that is difficult to develop complete plans in advance of the job, construction by Force Account or rental contract may be used.

C. CONTRACTING AUTHORITY

1. Except as to the installation of works of improvement on Federal lands, the Secretary of Agriculture is not authorized to construct or enter into any contract for the construction of any structure unless there is no local organization authorized by State law to undertake such construction or enter into such contract, and in no event after July 1, 1956. In cases where the Service lets contracts under this authority, a Trust Fund Agreement will be executed and the funds provided by the sponsoring agency(s) placed in an appropriate Trust Fund Account prior to award of contract.

Appropriate arrangements should also be made concerning the setting up of funds for contingencies such as over-runs, extra work, etc. Authorities and general operating procedures contained in the Administrative Services Division and Budget and Finance Division Handbooks will apply in such transactions.

2. Authority for any State, political sub-division thereof, soil or water conservation district, flood prevention, or control districts, or combinations thereof, or any other similar agency to contract varies among the states. The Act requires that the local organization(s) must be authorized under state law to undertake construction or enter into contracts for works of improvement.

D. CONSTRUCTION CONTRACTING BY GOVERNMENT

The Government may contract the construction of works of improvement under the Act in one of two ways:

1. By Soil Conservation Service

Where there is no local organization authorized by State law to engage in contracting, the Service may perform this function until July 1, 1956. Under such an arrangement the procedures, policies and regulations set forth in the Administrative Services Division Handbook with respect to construction (with the added requirement of Trust Fund Agreements) will apply. Thus in properly interpreting and applying guiding instructions, the distinction as to whether the Government is the Contracting Agency or whether the Local Organization is the Contracting Agency must be kept clearly in mind. (See Contracting Authority Paragraph C).

2. By Other Federal Agency

The agency responsible for administration of the land may install by contract, or otherwise, works of improvement on Federal lands (Section 11). In these cases the rules and regulations of the agency concerned, together with the provisions of any agreement between the Soil Conservation Service and the agency, will apply to the preparation, administration and supervision of the contract.

E. CONSTRUCTION CONTRACTING BY LOCAL ORGANIZATION

1. The procedures set out in this section are predicated primarily upon conditions where the local organization will be the Contracting Local Organization.
2. Under the Act, the Secretary of Agriculture will confine his activities in the field of contracting to that of assisting the Local Organization or to the construction of projects on Federal lands which are of primary benefit to those lands. The primary responsibility for contracting and administering non-Federal

contracts will be in the hands of the State and local agencies. The local character of these projects should be preserved at all times and they should not become Federal construction projects.

F. CRITERIA FOR CONTRACTING LOCAL ORGANIZATION

1. As soon as practicable during the formulation of the work plan, it is important to affirmatively determine, by documentation from the sponsoring local organization that it either has adequate facilities or has firm commitments for letting or servicing contracts. Federal funds will be made available to the local organization only for actual construction operations and are not to be used to defray local organization costs of awarding and administering contracts. Thus, the Government must be assured that the Contracting Local Organization has available an adequate staff of experienced personnel and the necessary resources to assure that the contract will be executed and all work performed in accordance with plans, specifications and administrative requirements. Responsibility for making this determination is vested in the State Administrative Officer.

The following criteria must be met:

- a. The local organization must have legal authority to act as the Contracting Local Organization.
- b. The Contracting Local Organization must have adequate facilities for arranging for, letting, and servicing construction contracts.

2. Other requirements to be met:

The following conditions shall also govern the local organization:

- a. In choice of contractors, the Contracting Local Organization will use the same general basis for bid acceptance as the Department of Agriculture.
- b. At the time Federal funds are committed for the installation of works of improvement, the local organization contracting for such works must have in hand or have binding arrangements made for the funds necessary to meet its share of the contract cost.
- c. Where Federal funds are used, the local organization will not be permitted to bid on any rental or construction contract for the installation of works of improvement.
- d. Federal funds made available to the local organization for the installation of works of improvement by contract may be used only for making payments to the contractor in accordance with the terms of the contract. Such Federal funds may not

be used to pay or reimburse the local organization for the cost of any services provided by it for supervision, administration, engineering, and insurance, or for other similar costs.

G. EASEMENTS AND RIGHTS-OF-WAY SURVEYS

1. All necessary land, easements, and rights-of-way will be provided by the local organization without cost to the Federal Government. The local organization will provide surveying and legal services as shown in Section 15, I - D. The State Administrative Officer will be responsible for ascertaining that necessary right-of-way deeds or easements have been obtained and duly recorded. (See Section 15) He will also see that the Operations and Maintenance Agreement is properly prepared in accordance with Section 19 of this Handbook.
2. It is the responsibility of the local organization(s) to make arrangements for and defray expenses involved if any, in the removal or relocation of all public utilities, such as power lines, telephone lines, pipe lines, roads, buildings, bridges, fences, etc. Such arrangements must be fully made prior to the issuance of the Invitation to Bid. It is the responsibility of the State Administrative Officer to determine that such arrangements have been satisfactorily made and that the removal or relocation has been done or will be done in sufficient time not to interfere with the contractor.

H. PREPARATION OF INVITATION

1. Requirements to be included:

The Contracting Local Organization will use the sealed bid method of advertising and may incorporate into the invitation such requirements as desirable or as necessary to comply with State, county, and local laws, insofar as they are not contrary to the best interests of the Federal Government. The Contracting Local Organization will also include such requirements and conditions as the Government may specify as being necessary to protect its interests. Should requirements of one party be in conflict with those of the other, mutual agreement must be reached based on the circumstances attending each individual case.

2. What the Government may furnish.

The Soil Conservation Service may render assistance in preparation of the invitation to bid. In so doing it may provide the Contracting Local Organization with the following:

- a. Engineering designs, plans, and technical specifications, including reproductions as necessary.
- b. Engineer's estimate of cost. (Except for sponsoring local organization, its contents must be kept confidential until after award.)

- c. Recommendation for length of construction period and dates.
- d. Administrative instructions and information as necessitated by Federal requirements.
- e. Results of investigations, tests, surveys, and studies as may be necessary for the preparation of plans and for determining the physical and economic soundness of plans for works of improvement.
- f. Advice and cooperation in any phase dealing with assistance and carrying out of plans incident to the works of improvement.

3. Methods of Operation and Approvals Required

In furnishing and approving data, designs, specifications, etc., for use by the Contracting Local Organization the same general policies, procedures, standards, working relationships and authorities governing operations in the Flood Prevention and Watershed Protection construction programs will be used for application under the Act, except as otherwise provided.

Plans, specifications, designs, etc., prepared by another agency must be reviewed and approved by the Soil Conservation Service prior to incorporation into the invitation. All invitations to bid must be approved by the State Administrative Officer, in consultation with Program Staff and other Service personnel as deemed necessary, prior to their release by the Contracting Local Organization where Federal funds are to be expended.

I. CONTRACTUAL STIPULATIONS

- 1. It is expected that the Contracting Local Organization will protect the Government's interest by exercising prudent management and employing sound business principles in conducting its contractual functions. In reinforcing the Government's interest and providing necessary protection, it will be expected to incorporate in the contract such stipulations as the Government may determine to be needed, including the following:

a. Bonding Requirements

As bid guaranty, each bidder, shall submit a negotiable U. S. Bond or Note, Bid Bond, Cashier's or Certified Check, or Post Office Money Order in an amount not less than 10 percent of the amount bid. The successful bidder, upon execution of contract, shall be required to furnish Performance and Payment Bonds in amounts of not less than 100 percent and 50 percent respectively of the estimated aggregate payments to be made under the contract.

b. Liquidated Damages

The Contracting Local Organization shall incorporate in the invitation an item of liquidated damages on the basis of the cost of engineering, inspection and other assistance furnished in administering the contract. This cost will vary according to the size of the project. However, it has been the experience of the Soil Conservation Service that the following table of rates is representative of the costs of personnel required in administering the various phases of construction contracts. The rates as established shall not be less than given in the table below; however, if any substantial increase is contemplated by the Contracting Local Organization, it should discuss the proposed change with the Service.

ORIGINAL CONTRACT AMOUNT		DAILY CHARGE
2,001	to 25,000	\$ 25
25,000	50,000	40
50,000	75,000	60
75,000	100,000	80
100,000	and up	100

Collected liquidated damages will be prorated between the sponsoring local organization, the Contracting Local Organization, and the Federal Government in the same ratio as that established by paragraphs "B.1", "C.1.", and "D.1.", of the cooperative agreement executed pursuant to paragraph J.(5).

c. Copeland (Anti-Kickback) Act

The regulations of the Secretary of Labor applicable to contractors and sub-contractors (29 CFR, Part 3) made pursuant to the Copeland Act, as amended (40 U.S.C. 276 c) and to aid in the enforcement of the Anti-Kickback Act (18 U.S.C. 874) are to be made a part of all contracts by reference. The contractor will comply with these regulations and any amendments or modifications thereof and the prime contractor will be responsible for the submission of affidavits required of subcontractors thereunder. Affidavits as necessitated under this Act will be filed in the contract files of the State office. (The Davis-Bacon Act, the 8-hour Laws, the Miller Act, as such, and convict labor prohibition will not apply.)

d. Member of Congress Clause

Any contract or agreement involving expenditure of Federal funds will contain a statement that "no member of or delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of the contract, or to any benefit that may arise therefrom." The provision shall not be construed to apply if made with a corporation for its general benefit.

e. Contractor's Liability

It is expected that the Contracting Local Organization will protect the interests of the Government (as well as that of its own) by fixing certain responsibilities upon the contractor in the event of loss of or damage to the works of improvement. The contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the work. He shall also be responsible for all materials delivered and work performed until completion and final acceptance, except for any completed unit thereof which theretofore may have been finally accepted.

No such damage or loss shall relieve the contractor of, or in any way affect his obligations to complete and deliver the work in accordance with the contract requirements, irrespective of any insurance carried by the contractor. Nothing herein shall prohibit the Contracting Local Organization from making final acceptance of any completed unit of work, provided it so desires and further provided that the Government has concurred in final acceptance.

f. Subcontractors

The contractor shall within such time as determined by the Contracting Local Organization after the date of the contract, notify the Contracting Officer in writing of the names of all subcontractors proposed for the work, the extent of the work to be done by each, and the general terms and conditions of each proposed subcontract. Such subcontracting proposals must be concurred in by the State Administrative Officer and made a matter of record in all offices receiving copies of the contract. If, for sufficient reason at any time during the progress of the work, the Contracting Officer determines that any subcontractor is incompetent or undesirable, he will notify the contractor accordingly, and immediate steps will be taken for cancellation of such subcontracts. Sub-letting by subcontractors shall be subject to the same regulations. (The State Administrative Officer will counsel with the Contracting Local Organization on any phase dealing with subcontractors, including approvals or cancellations.)

g. Quantity Variation Provisions

In protecting the Government's interests, the Contracting Local Organization shall reserve the right to increase or decrease by twenty-five percent, or less, at the unit prices shown, the unit quantities of work to be performed, as set forth in the bid schedule.

h. Changes

In addition to the 25% clause, there shall be incorporated a provision for performing extras within the scope of the contract to take care of changes and changed conditions. The contracting officer of the Contracting Local Organization may at any time, by written order (with prior concurrence of the State Administrative Officer who shall obtain required technical approval) and without notice to the sureties, make changes in the drawings and specifications of the contract and within the general scope thereof. If such changes cause an increase or decrease in the amount due under the contract, or in the time required for its performance, an equitable adjustment shall be made and the contract shall be modified in writing accordingly.

i. Materials to be Furnished by the Contractor

Unless otherwise specified in the invitation, or on the plans all equipment, materials, and articles incorporated in the work to be performed under the contract are to be new. As required by the contracting officer, the contractor shall furnish certification prepared and signed by the manufacturer and/or supplier to the effect that the items furnished meet all the requirements of the plans and specifications. Such certification must be furnished prior to the use of the material in any part of the construction and should set out citation to the specification under which furnished, contract number, site number, type of material, quantity, and the name of the contractor purchasing the material.

J. LETTING CONTRACTS

1. Pre-invitation Notices

The Contracting Local Organization shall prepare and furnish to potential bidders a notice announcing the pending advertisement. The announcement should contain such information as the following:

- a. Nature, scope or size, and location of work.
- b. Bonding requirements.
- c. Closing date of invitation and completion time of job.
- d. Whom to contact at site of work and the office from which to request invitations to bid.

Based upon requests received as a result of these notices, the Contracting Local Organization will furnish invitations to prospective bidders and will receive and protect bid responses until the time set for opening.

2. Opening of Bids

The Contracting Local Organization will conduct all phases of the bid opening, although the Service will have a representative

present in the capacity of an observer. The observer should be an individual experienced in bid opening procedures and will be expected to make a report to the State Administrative Officer concerning the events transpiring at the opening. The State Administrative Officer will be responsible for seeing that a qualified representative of the Service is in attendance at all openings.

3. Determining Low Bidder

The Contracting Local Organization will be responsible for determining the low bidder and for ascertaining the sufficiency of his equipment plant. When all such preliminaries are completed, the low bidder's file and an abstract of all bids, together with recommendation for award, will be turned over to the State Administrative Officer for examination and concurrence prior to award. The State Administrative Officer may, if deemed necessary, cause a physical inspection of the low bidder's plant to be made as an aid in determining his ability to perform. Should a question arise concerning this point, the matter should be resolved by working through the Contracting Local Organization.

4. Recommending Award

The State Administrative Officer will, if the low bid exceeds the engineer's estimate, notify the State Conservationist of this fact. Cases involving an expenditure of Federal funds in excess of \$50,000 should be referred by the State Administrative Officer with his recommendations to Washington for final approval. It is expected that thorough checks, including those as to economic feasibility, easements, sufficiency of bidder's plant, etc., will be made by the State office prior to referral to Washington.

The State Administrative Officer may refuse to concur in the recommendation for award, if in his opinion, the requirements of the Government are not fully met, or there is doubt as to the low bidder's ability to perform. In these instances, he should work closely with the Contracting Local Organization in efforts to remedy the deficiencies. In some cases, it may be necessary to recommend disqualification of the low bidder and to recommend acceptance of another bid or to request readvertisement.

5. Cooperative Agreements

Prior to the release of invitation to bid by the Contracting Local Organization, a numbered agreement (see exhibit at end of Contract Section 13) shall be prepared by the Soil Conservation Service. The agreement shall be executed by the Soil Conservation Service (where it is providing funds for construction) and the Contracting Local Organization. Where the Contracting Local Organization is not the Sponsoring Local Organization, the

agreement should, in addition, be executed by the Sponsoring Local Organization(s). This agreement, rather than the contract, is the instrument through which the Government will work with the Contracting Local Organization on contracting matters. Hence, it should be detailed and complete in every respect to clearly prescribe all commitments of the parties to the agreement (see also Section 13, Contracts, Paragraph A3).

Among other things, these agreements will cover the following:

- a. Identification of works of improvement.
- b. Percentage of funds to be furnished by Sponsor(s). (Estimated cost of works of improvement, including contingencies, should also be shown)
- c. Percentage of funds to be furnished by Government. (Estimated cost of works of improvement, including contingencies, should also be shown)
- d. Percentage of funds, if any, to be furnished by Contracting Local Organization.
- e. Provision for additional funds by Government and Sponsoring Local Organization that may need to be provided over and above that required by b and c in event of emergency or inadequacy.
- f. Method of payment by Government.
- g. How changes in plans, specifications, etc., are to be handled.
- h. Records and data to be maintained by Contracting Local Organization.
- i. What Contracting Local Organization is to furnish in administering contract.
- j. Provision for continuous inspection of all work, as determined by the Government to secure compliance with plans and specifications.
- k. What assistance the Soil Conservation Service will provide during installation of works of improvement.
- l. Provision for furnishing "as built" plans to Government.
- m. Reference to Operation and Maintenance Agreement.

6. Distribution of Agreement.

The Cooperative Agreement, as well as any supplements thereto, will be prepared in sufficient copies to enable distribution

to all offices receiving copies of the contract, with exception of the contractor. Upon affixing his signature, the State Administrative Officer will retain a suspense copy and forward the original and remaining copies to the Contracting Local Organization for signature by a responsible designated individual. It will then be signed by the local organization(s). (if not the Contracting Local Organization). After execution, one signed copy and three conformed copies should be returned to the State Office for distribution as follows:

Signed copy - State Office

1 copy - Engineering and Watershed Planning Unit

1 copy - Government Representative

1 copy - Administrative Services Division, Washington, D.C.

7. Award of Contract

Upon receipt of the Government's approval and concurrence in award, the Contracting Local Organization may proceed with executing the contract by making acceptance and giving notification to the contractor, together with other necessary instructions.

8. Distribution of Copies

As soon as satisfactory bonds are received and the contract signed, the Contracting Local Organization shall furnish copies of the contract to the State office, to be distributed as follows:

Signed copy - State office

1 conformed copy - Engineering and Watershed Planning Unit

1 conformed copy - Government Representative

1 conformed copy - Administrative Services Division,
Washington, D. C.

K. ADMINISTERING CONTRACTS

In cooperating in the installation of works of improvement, the Government may furnish installation services. The Government shall not, however, deal directly with the contractor with respect to matters for which the Contracting Local Organization has primary responsibility.

1. Installation Services

To provide the installation service referred to above and defined in Section 7, B.4, the Government will designate for all works of improvement a government representative (who will be an engineer for structural jobs) to carry out its obligations, protect its interests and maintain close working relations with the Contracting Local Organization.

The government representative will be appointed (a) on works of improvement involving Federal funds in excess of \$50,000 by the Director, Administrative Services Division and (b) on works of improvement of \$50,000 or under of Federal funds by the State Administrative Officer. All appointments will be on an individual contract basis. The state office should supply the name of the government representative to be designated when appointment is to be made by Washington.

a. Duties of Government Representative.

The government representative will perform the inspecting and reporting services required by the government. Where the work load or its geographic distribution justifies, he may be aided in carrying out his functions by other government personnel.

The general functions of a government representative are stated in Administrator's Memo SCS-61. In general, he gives assistance to the local organization's contracting officer. He may provide the necessary inspection, installation assistance, and interpretation of plans and specifications, and may recommend acceptance of work. He protects the Government's interests by making periodic checks and inspections of construction operations.

The government representative will make such checks as needed to verify the progress of work in support of partial and final payments.

b. The principal Engineering and Inspection Functions commonly performed in connection with contracts.

- (1) Helps contractor plan work in advance according to construction schedule by arranging for scheduled engineering assistance.
- (2) Recommends when work should be stopped and started and when change orders and supplements are needed and then prepares them or assists in their preparation.
- (3) Determines whether construction work is acceptable and done in accordance with the plans and specifications.

- (4) Makes periodic inspection reports and construction progress reports.
- (5) Interprets plans and specifications for contractor.
- (6) (a) Measures quantities of construction work for periodic and final payments, and (b) certifies to quantities.
- (7) Stakes out lines, grades, and locations for construction work.
- (8) Runs field tests on earth fill materials, concrete, concrete aggregates and other materials used in construction.
- (9) Checks acceptability of concrete aggregates, cement, water, pipe, reinforcing steel, hardware, paint and other materials used for construction.

c. Utilization of Sponsoring Local Organization's Services

When the sponsoring local organization has available (either within its own organization, by contracting, or otherwise engaging) competent engineers and inspectors, installation services assistance should be furnished by it to the maximum extent possible considering the personnel and facilities available. Credit for such installation services may be allowed in cost-sharing as provided in Section 7. F. 1. This should be provided for in the cooperative agreement.

On those installations where it is not feasible for local organizations to provide an on the job engineer-inspector, the Federal Government may furnish engineering and inspection services as listed in item b. (1) through (9) above. When performing these services, the Government Representative shall deal direct with the contracting agency. Any assistance so furnished by the government must be set forth in the cooperative agreement.

2. Construction Schedule

- a. The Contracting Local Organization shall within 20 calendar days after the date of receipt of commencement notice by the contractor, but prior to work commencement, require the contractor to furnish a complete construction schedule showing in detail his proposed program of operations. The government representative will be furnished 3 copies of such schedule as well as any revisions, for his approval and use in a continuing examination of the progress of the work.

The government representative shall furnish the State Office and Engineering and Watershed Planning Unit with a copy of the construction program and revisions for their review and completion of files.

3. Maintenance of Records

- a. The Contracting Local Organization's inspector shall maintain a daily record of construction activities and progress. When necessary, the State Administrative Officer and the government representative will counsel with the Local Organization's contracting officer, making recommendations designed to keep work in pace with schedule.
- b. The government representative shall submit a monthly progress report and such other reports, as required, in three copies, to the State Office for use of the State Administrative Officer and the State Conservation Engineer in comparing the accomplishments with the construction schedule. The State office will distribute the above reports, together with notices of any actions on its part, to the Engineering and Watershed Planning Unit, and to the Washington Administrative Services Division.

4. Stop and Resume Orders

- a. The government representative may, as necessary, collaborate with the Local Organization's contracting officer in recommending the issuance of "stop" and "resume" orders. When necessary, he may assist in preparing them for the contracting officer. Three copies of all "stop" and "resume" orders should be promptly sent to the State office for information purposes and for completion of records. The State office should forward one copy of such orders to the Engineering and Watershed Planning Unit and to the Administrative Services Division in Washington.

5. Modification of Contracts

- a. Change orders and supplemental agreements are types of contract modifications. The distinction as to whether a change order or a supplemental agreement is required rests upon whether the contractor can be required under the existing contract to perform the proposed change or whether such change cannot be required of him without his consent and acceptance.
- b. The Service will consult with the Contracting Local Organization concerning modifications of the contract although the Contracting Local Organization will be responsible for their issuance. All changes must have prior concurrence of the Government.

- c. The State office shall utilize the services of the Engineering and Watershed Planning Unit, and the Washington office, in keeping with established Service policy. Copies of all modifications shall be promptly furnished to the State office for its records, and for the files of the Engineering and Watershed Planning Unit, the government representative and for the Washington Administrative Services Division.

6. Change Orders

- a. A change order is the proper medium for effecting changes under a contract containing provisions permitting changes within the general scope of the contract. Such change orders are confined to changes which the contract authorizes the contracting officer to make. Since the contractor has agreed, by the contractual provision, that such changes can be made (including, under certain circumstances, an equitable adjustment in price or time or both) change orders may be issued without the consent of the contractor but should always be in writing.
- b. Extras (if within the scope of the contract) and changed conditions, and 25% quantity changes, shall be handled by issuance of change orders. Quantity changes in excess of 25% may require a price adjustment. It may also be necessary to arrive at an equitable price to be charged for extras within the scope of the contract but not specifically set out in the bid schedules. Therefore, where price adjustments must be made it will be desirable to secure the signature of the contractor on the change order.
- c. A government representative may approve 25% variation changes (unless they involve alterations in plans and specifications) for the Government, if delegated such authority. It may be advisable, in some cases, to withhold this authority until the government representative receives the needed experience to satisfactorily handle this phase for the Government. The letter of appointment should set out the duties and responsibilities of the government representative. Copies should be made available to all parties having a copy of the contract, except it will not be necessary that the contractor be notified.
- d. Extra work and material will be handled by the issuance of a change order, if it is permitted by, and is within the general scope of, the contract. Otherwise, it should be effected through the issuance of a supplemental contract agreement at a negotiated price or through advertising and awarding another contract, depending upon the existing circumstances in each case. In either instance prior approval of the State Administrative Officer is required. He will also obtain assistance from the State Conservation Engineer and from the Engineering and Watershed Planning Unit as required.

7. Distribution of Copies

- a. All parties having copies of the basic contract should be furnished with a copy of any modification issued. It is the responsibility of the Contracting Local Organization to provide these copies. The State office should be furnished copies for distribution as follows:
 - 1 copy (manually signed) - State office
 - 1 copy - Engineering and Watershed Planning Unit
 - 1 copy - Government Representative
 - 1 copy - Administrative Services Division, Washington, D.C.

8. Supplemental Contract Agreements

- a. A supplemental agreement is the proper medium for effecting changes to a contract which requires the consent of the contractor. Supplemental agreements shall be in writing, signed by the contractor and the contracting officer. This type modification is used primarily when the change is not within the general scope of the basic contract. Care must be exercised when contemplating a change outside the scope of the contract. It should be determined that monies are available for the particular job, that it is in furtherance of the work program involved and that it is inherent to the general type work being performed under the basic contract. A determination must be made that the negotiated price does not exceed the price that could reasonably be expected through formal advertising.

9. Distribution of Copies

- a. The same distribution as that for change orders will be followed. (see paragraph 7a)

10. Partial Payment Estimates

- a. The government representative shall certify that estimated construction quantities are correct. Form SCS-49a contains a certification to be executed for partial payments. Upon completion of the job, he will make a careful inspection to determine and verify final quantity. When final payment report is submitted, the government representative will alter the printed certification on Form SCS-49a by deleting the words "to the best of my knowledge" and by deleting the word "estimated" in the third line of the certification. The certification will then read as follows:

I certify that I have inspected the above work;
that it is in accord with specifications and
contract and that the quantities are correct;
and that work herein for the period from
_____19_____, to _____19_____,
inclusive, has not been reported on any previous
estimate.

The Soil Conservation Service will make partial payments to the Contracting Local Organization as the work progresses. Form SCS-49a, the exhibit appearing at the end of this section, is the prescribed payment form. The Contracting Local Organization will prepare the estimate monthly, usually at the end of each month. The estimates should be prepared by the Contracting Local Organization and submitted to the State office in the original and two copies. The following certificate should be executed by the contracting officer or an individual acting for him:

Payee - Name of Contracting Local Organization

Address

I certify that the above bill is correct and just and that payment therefor has not been received.

Date

Per

Title

- b. The estimate serves as a billing instrument and the State office will process the document in the same manner as other invoices. Checks will be forwarded by the disbursing officer directly to the Contracting Local Organization.
- c. In preparing estimates for partial payments, the material delivered on the site and preparatory work done will not be taken into consideration.

11. Distribution of Copies

- a. The original of the estimate will be filed in the State office. One approved copy will be returned to the Contracting Local Organization and the remaining copy forwarded to the government representative for his information.
- b. The contract shall specify that in making partial payments, the Contracting Local Organization shall withhold 10% of the amount due the contractor on each partial payment estimate until final completion and acceptance of all work covered by the contract. The Government shall retain 10% of the amount due the Contracting Local Organization in making partial payments to the Contracting Local Organization. This provision for partial payment shall not be construed as relieving the contractor from responsibility for all materials and work upon which payments have been made or

the restoration of any damaged work or as a waiver of the right of the Contracting Local Organization to require the fulfillment of all of the terms of the contract for its protection and the protection of the Government.

12. Inspections and Tests

- a. Supervision and inspection is a keynote of quality construction. In discharging responsibilities with respect to construction operation, the Construction Engineer in the Engineering and Watershed Planning Unit is available to assist the State Conservation Engineer. He will work with the State Conservation Engineer and Contracting Local Organization in developing an inspection program that meets all the requirements to assure that technical phases of the work are completed in accordance with the contract. The Construction Engineer will also work with the State Conservation Engineer in checking the progress and adequacy of construction as the work proceeds.
- b. The tests, inspections and studies made by the Government will vary according to the facilities offered by the Contracting Local Organization. If the Contracting Local Organization has an experienced engineer on the job and has access to dependable laboratory facilities for the conducting and analyzing of tests, then the Government may utilize these data, field notes, and records in satisfying various phases of inspectional requirements. If adequate control tests are not provided, the government representative may make such tests as may be required to determine acceptability of concrete aggregates, cement, water, pipe, hardware, paint, and other materials used for construction.

13. Safety and Accident Prevention

- a. The Contracting Local Organization has the primary responsibility for safety and accident prevention. However, the government representative may advise and consult with the contracting officer to see that the contractor exercises reasonable precautions for the safety of employees on the work and that compliance is made with all applicable provisions of Federal, State and municipal safety laws and building and construction codes. Standards prescribed by the Association of General Contractors shall be followed unless in conflict with Federal, State or local safety laws and codes

14. Violations

- a. The Contracting Local Organization is responsible for seeing that all contract violations are promptly dealt with. The government representative should report to the contracting

officer or his representative any violations of or deviations from the terms and conditions of the contract as they occur. When any significant deviations or violations occur, the government representative should promptly report them to the State Administrative Officer.

L. ACCEPTANCE OF WORK AND FINAL PAYMENT

1. As soon as the work has progressed to the point where a completion date can be projected, arrangements should be made by the contracting officer of the Local Contracting Organization, with the government representative, for the final inspection. The government representative should then notify the State Administrative Officer who will, in turn, contact other interested parties of the Government, including the State Conservationist and the Engineering and Watershed Planning Unit. It is incumbent upon the Contracting Local Organization to notify its engineer, the contractor, and representatives of local sponsoring groups in order that they may likewise participate in the final inspection.
2. In performing the final inspection from the standpoint of the Government, consideration should be given but not necessarily limited to the following items:
 - a. Records of required certifications that materials furnished by the contractor meet specifications.
 - b. A check of the entire project to determine that work has been performed in accordance with all contractual requirements.
 - c. Inspection of sites and surroundings to determine that satisfactory restoration of work and adjacent areas has been made by replacing or repairing fences, roads and other improvements removed, altered or damaged during the course of construction.
3. After final inspection and assurance that the work is completed in accordance with plans and specifications, the government representative and the State Conservation Engineer will execute a certification of completion to be sent to the State Administrative Officer. This statement will show the date of completion and that the works of improvement were accomplished in accordance with all contractual requirements. This will enable the State Administrative Officer to formally notify the Contracting Local Organization of final acceptance of the job on the part of the Government.
4. The contracting officer of the Contracting Local Organization should, upon assurance that the work has been accomplished in accordance with the contract, notify the State Administrative Officer in writing that the works of improvement have been completed to the satisfaction of the Contracting Local Organization.

5. The State Administrative Officer will then make settlement with the Contracting Local Organization concerning final payment based upon certification from the government representative setting out final measurements of work in place.

M. FISCAL REVIEW

1. The Government reserves the right prior to final payment to make fiscal review of all records of the Contracting Local Organization dealing directly or indirectly with the letting and administering of the contract.

Such records shall be preserved for a period of not less than five years and made available to authorized representatives of the Federal government for examination, upon appropriate notice.

2. Contract records in the State office should be properly maintained and preserved in accordance with records management procedures. Retention of all field notes and supporting data is necessary since all of the Government's records must be preserved for audit and review by the General Accounting Office and interested officials of the Service.
3. Preceding final inspection and acceptance of work, the State Administrative Officer must see that affidavits with respect to payment of wages are on file in the State office (see Anti-Kickback Regulation 29 C.F.R. Part 3.).

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Form SCS _____

State _____

Watershed _____

COOPERATIVE AGREEMENT FOR INSTALLATION OF WORKS OF IMPROVEMENT

THIS AGREEMENT, made this _____ day of _____, 19____,
by and between _____

hereinafter called the Sponsoring Local Organization, and _____

hereinafter called the Contracting Local Organization, and the Soil Conser-
vation Service, United States Department of Agriculture, hereinafter called
the Service,

WITNESSETH THAT:

WHEREAS, under the provisions of the Watershed Protection and Flood Prevention
Act a work plan for the above watershed was agreed to by the Sponsoring Local
Organization and the Service on the _____ day of _____, 19____,
for the installation of works of improvement therein described, including the
works of improvement hereinafter referred to, and

WHEREAS, The Service will assist the Sponsoring Local Organization in carrying
out the works of improvement hereinafter referred to and in so doing has
furnished or has approved surveys, plans, and specifications or estimates for
said works of improvement,

NOW THEREFORE, In consideration of the premises and of the several promises to
be faithfully performed by the parties hereto as hereinafter set forth, the
Sponsoring Local Organization, the Contracting Local Organization, and the
Service do hereby mutually agree as follows:

A. This agreement covers certain works of improvement which are described in
the above watershed work plan as follows:

The cost of installing said works of improvement, including contingencies,
is estimated to be \$_____.

B. The Sponsoring Local Organization(s) will: (If more than one, further
set forth the duties and
functions of each separately.)

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1. Provide _____% of the actual cost of installing said works of improvement. The sources of such funds are as follows:
2. Assure contingency funds over and above those reflected in paragraph "A" above as may be needed for the purpose of installing said works of improvement. (Set out the amount and source of funds that can be made available for this purpose.)
3. Furnish the services and facilities described below in administering the contract:
4. Submit proposed changes in plans and specifications in the following manner to the Service for approval before being effected:
5. Maintain records as to materials furnished, work performed, and progress of the work, as follows:
6. Be responsible for the maintenance of said works of improvement in accordance with the maintenance agreement entered into on the _____ day of _____, 19____, between _____ and _____.
7. Other:

C. The Contracting Local Organization will:

1. Provide _____% of the actual cost of installing said works of improvement. The sources of such funds are as follows:
2. Assure contingency funds over and above those reflected in paragraph "A" above as may be needed for the purpose of installing said works of improvement. (Set out the amount and source of funds that can be made available for this purpose.)
3. Furnish the services and facilities described below in administering the contract:
4. Submit proposed changes in plans and specifications in the following manner to the Service for approval before being effected:
5. Maintain records as to materials furnished, work performed, and progress of the work, as follows:
6. Submit payment estimate covering the pro rata share of the Service for providing payments to the Contracting Local Organization in accordance with the following schedules:

7. Be responsible for the maintenance of said works of improvement in accordance with the maintenance agreement entered into on the _____ day of _____, 19____, between _____ and _____.
8. Upon completion of work furnish "as built" plans to the Service showing said works of improvement as installed.
9. Other:

D. The Service will:

1. Provide _____% of the actual cost of installing said works of improvement. (Prior approval of the Service must be secured before any work is authorized which would cause the total cost of installing said works of improvement to exceed the estimate stated in paragraph "A" above.)
2. Inspect the work as it progresses or as may be otherwise arranged by the Service to assure compliance with plans and specifications as follows:
3. Review and process changes in plans and specifications in the following manner:
4. Furnish assistance during the installation of said works of improvement as follows:
5. Make partial payments to the Contracting Local Organization as outlined below: (The Service will withhold 10% of each payment estimate until the final payment estimate.)
6. Other:

- E. Collected liquidated damages will be pro-rated between the Sponsoring Local Organization, the Contracting Local Organization, and the Federal Government in the same ratio as that established by paragraphs "B. 1.", "C. 1.", and "D. 1.".

(Name of Sponsoring Local Organization)

By: (Sig.) _____
Title _____
Date _____

(Name of Contracting Local Organization)

By: (Sig.) _____
Title _____
Date _____

Soil Conservation Service
United States Department of Agriculture

By: (Sig.) _____
Title _____
Date _____

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UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service

CONTRACT PAYMENT ESTIMATE										
ESTIMATE NO.		CONTRACT NO.		CONTRACT DATED		CONTRACTOR (INCLUDE ADDRESS)			DATE OF ESTIMATE	
DESCRIPTION AND LOCATION OF WORK UNDER CONTRACT				\$ Government		Cost Sharing (Cash Outlay Only)		\$ Sponsoring Agency (s)		Agreement No.
COMPLETION DATES:				ORIGINAL		REVISED		ACTUAL		
ITEM NO.	ITEM DESCRIPTION	TOTAL QUANTITY OR AMOUNT		UNIT	THIS PERIOD			TOTAL TO DATE		PER-CENT COMPLETE
		ORIGINAL	REVISED		FROM 19 TO 19 Incl.	UNIT PRICE	AMOUNT	FROM 19 TO 19 Incl.	TOTAL QUANTITY	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
TOTAL AMOUNT EARNED				THIS PERIOD \$			TO DATE \$			
DEDUCTIONS										
RETAINED PERCENTAGE . . .		GOVERNMENT		\$			\$			
		CONT. LOCAL ORG.		\$			\$			
PREVIOUS PAYMENTS . . .		GOVERNMENT		\$			\$			
		CONT. LOCAL ORG.		\$			\$			
OTHER		GOVERNMENT		\$			\$			
		CONT. LOCAL ORG.		\$			\$			
TOTAL DEDUCTIONS				(-) \$			(-) \$			
REFUNDS										
RETAINED PERCENTAGE . . .		GOVERNMENT		\$			\$			
		CONT. LOCAL ORG.		\$			\$			
OTHER		GOVERNMENT		\$			\$			
		CONT. LOCAL ORG.		\$			\$			
TOTAL REFUNDS . .				\$			\$			
AMOUNT DUE BY				Government \$			\$			
				Local Organization \$			\$			
PAYEE - NAME OF CONTRACTING LOCAL ORGANIZATION				Total Original Estimated Value Of Contract			\$			
ADDRESS				Revisions Due To Supplemental Agreements			\$			
				Revisions Due To Change Orders			\$			
I certify that the above bill is correct and just and that payment therefor has not been received.				TOTAL VALUE OF CONTRACT REVISED TO DATE			\$			
Date				Approved:			I HEREBY CERTIFY THAT I HAVE INSPECTED THE ABOVE WORK; THAT TO THE BEST OF MY KNOWLEDGE IT IS IN ACCORD WITH SPECIFICATIONS AND CONTRACT AND THAT THE ESTIMATED QUANTITIES ARE CORRECT; AND THAT WORK HEREIN FOR THE PERIOD FROM 19 TO 19, INCLUSIVE, HAS NOT BEEN REPORTED ON ANY PREVIOUS ESTIMATE.			
Per				State Administrative Officer or			SIGNATURE			
Title				Authorized Representative			GOVERNMENT REPRESENTATIVE			

SECTION 14

COMPLIANCE WITH STATE LAWS

Sponsoring local organization(s), landowners, and others participating in a watershed protection and flood prevention project should be informed that it is their responsibility to furnish assurance, prior to provision of Federal assistance in installation of works of improvement, that all requirements of State laws, procedures, and regulations affecting the project have been complied with.

1. Water rights

The sponsoring local organization(s) must, prior to the installation of any works of improvement, acquire or provide evidence that landowners have acquired, pursuant to State law, such water and storage rights as may be needed in the installation and operation of the works of improvement.

The Department of Agriculture and the Soil Conservation Service will comply strictly with State laws pertaining to the acquisition of water rights. Similar compliance will be required of individuals and organizations receiving assistance under the Act.

2. Compliance with State laws on construction of facilities

Many States have laws, procedures, and regulations relating to the design, construction and operation of such facilities as the structural works of improvement to be installed under the Act.

Some States require formal approval of dams which exceed specified limitations. Plans for water diversion or spreader systems require authorization under some conditions. State regulations often contain standards for types of construction involved in projects authorized under the Act. The sponsoring local organization(s) shall be responsible for securing all necessary permits and authorizations to comply with procedures and regulations relating to the types of construction involved.

Because of the many differences, no uniform procedures may be outlined for use in all States. Each State Conservationist must determine the proper procedure to be followed to assure strict compliance with local laws, procedures and regulations. It is important that good working relations be maintained between the office of the State Conservationists and the State Engineers or other appropriate State officials or agencies.

It will be the responsibility of the State Conservationist to determine that the requirements of this section have been fulfilled prior to providing financial assistance in the installation of any structural works of improvement.

SECTION 15

PROPERTY RIGHTS AND RESPONSIBILITIES

- I. Responsibility for acquisition of necessary legal interests in land. The Act specifically requires that local organizations shall "acquire without cost to the Federal Government such land, easements, or rights-of-way as will be needed in connection with works of improvement installed with Federal assistance." This requirement prohibits the use of Federal funds for acquiring any interest in land, easements or rights-of-way.

A. Ownership of land or interests in land required for installation of works of improvement.

Any interest in land required for works of improvement (including fee simple title, easements, and installation permits) must be taken in the name of the local organization, or one of the local organizations, that has executed the watershed work plan agreement and not in the name of the United States.

B. Minimum Service requirements for interest in land applicable to cooperating organizations in the installation of works of improvement.

In order to protect the government's interest there have been developed certain minimum requirements which must be complied with prior to the installation of works of improvement.

1. How necessary rights will be acquired - Documents required.

Deeds conveying fee simple title, or easements (Exhibit A), or installation permits (Exhibit B) should be obtained for all works of improvement.

a. Deeds conveying fee simple title.

Deeds conveying fee simple title to the local organization may be secured in those instances where circumstances are such as to make this course of procedure desirable.

- (1) Procedure to be followed in execution and recording, title search, etc.

Requirements:

The procedures prescribed below for acquiring an easement should be followed when a deed conveying fee simple title to land is obtained, except it is necessary in all cases that the local organization make a title search and examination.

b. Easements.

Easements should be used for all cases (except where land is deeded) not covered by "c" below. Special provisions needed may be listed under the heading of item 8 of the easement form.

Requirements:

- (1) The area covered by an easement must be described in such a manner that its boundaries can be definitely established. Rights of ingress and egress often times are not as clearly described in the easement but the actual right-of-way is established by working with the landowner at such time as the need arises.
- (2) After an easement has been duly executed (this includes acknowledgement before a notary public or some other official authorized to take acknowledgements), it should be promptly recorded in the public land records of the county in which the land described in the easement is situated.
- (3) Unless there is a question as to ownership of the land described in an easement, a title search or examination with respect to such land will not be required, but reasonable inquiries and investigations sufficient to determine ownership of such land must be made by the responsible local organization. There will be no objection to a title search being made in any case if the local organization desires to do so.
- (4) The name and address of the holder of any mortgage, deed of trust, or other lien outstanding against the land described in a particular easement should be furnished in a statement to be executed by the landowner in the following form:

The undersigned landowner hereby states that there is set forth below the name and address of the holder of each mortgage, deed of trust, or other lien which is outstanding against the land described in the easement executed by the undersigned on _____, 19____, in favor of _____.

Name of Lienholder

Address

Date

Signature of Landowner

- (5) For works of improvement for which an easement is to be obtained, the holder of any mortgage, deed of trust or other lien outstanding against the land on which such works of improvement are to be located should consent to the execution of the easement in all such cases.

(6) Form of consent by a lienholder:

The undersigned, being the holder of a mortgage, deed of trust or other lien now outstanding against the land described in the easement executed on _____, 19____, by _____, in favor of _____ does hereby consent to the execution of said easement and to the installation of the works of improvement therein described.

Date

Signature of Lienholder

c. Installation permits.

Installation permits may be used for works and measures where the landowners assume all maintenance responsibilities.

Requirement:

Where installation permits are obtained, they need not be acknowledged or recorded, a title search or examination need not be made, and the consents of interested lienholders need not be secured.

C. Soil Conservation Service assistance in matters relating to the acquisition of interests in land.

1. Service responsibility to review instruments granting rights in land.

As part of cooperation in the installation of works of improvement, it is the responsibility of the Service to assure that minimum requirements as set out above are observed by the local organization(s) prior to the installation of works of improvement. In assisting the contracting local organization, it is the responsibility of the State Administrative Officer to determine that legally sufficient and adequate deeds, easements or installation permits have been secured before assent is given to the release of an invitation to bid.

a. Steps to be taken where documents vary from standard pattern.

Where the easement or installation permit contains additional provisions to those included in the form recommended for use by the Service, such additional provisions may be approved by the State Administrative Officer when there is no doubt as to their effect.

If there is doubt as to the effect of such additional provisions, the proposed form should be submitted to the

attorney-in-charge of the appropriate field office of the Office of the General Counsel for an opinion as to its legal sufficiency for the purposes intended. If the changes involve Service or Departmental policy and not the legal sufficiency of the instrument, the proposed form should be submitted to the Washington office for approval before invitations to bid are released.

D. Site Selection.

1. Soil Conservation Service assistance.

The Service may assist the local organization in delineating the proper site for works of improvement on the ground and the area and interests in land needed for their construction, maintenance and operation.

2. Local organization assistance

The local organization will provide through an authorized land surveyor, the necessary legal description and ties to legally recognized survey monuments or survey lines and markers, and will furnish the legal documents for conveying the needed interests in land.

II. Rights to use facilities.

It is desirable that maximum benefits be derived from the installation of the works of improvement. Consistent therewith, consideration should be given to such benefits as water withdrawal, recreational and wild life possibilities.

A. Consideration should be given to possible recreational uses which may be afforded by the installation. This is in keeping with multiple purposes contemplated by the Act. Appropriate provisions for developing maximum public benefits consistent with local needs and the primary purposes may frequently be incorporated in watershed work plans.

1. General public utilization of recreational opportunities and facilities that develop incidental to or are planned as a part of the project should be encouraged where feasible. However, Federal funds may not be used in the planning and installation of such collateral facilities. Any expenditures required for preventing loss of, or damages to, recreational and fish and wild life resources incident to installation of specific works of improvement may be credited as a project cost, but expenditures for the development of such facilities or any increase in the recreational values or fish and wild life resources above their current level are not creditable expenditures.

2. Regulation and use of recreational facilities.

The local organization should consider and it should be advised as to the potential uses of recreational facilities which may result from the installation and operation of works of improvement. Such advice should be consistent with operation and maintenance requirements and with proper safety and the protection of property. Whenever feasible such facilities should be made available to the general public and any income derived therefrom should be recommended for use by the local organization for operation and maintenance purposes.

When such facilities are to be made available to the general public, appropriate provisions for their use and control should be included in the easement by which the interest in land is acquired.

- B. Consideration should also be given to the regulation and control of the withdrawal for irrigation and other beneficial uses of water impounded by structural works of improvement for which an easement has been obtained by the local organization. If it appears that significant benefits may result from any such water withdrawal, consideration should be given to the desirability of including appropriate provisions in the easement to assure that the benefits from such water withdrawal will accrue to the local organization rather than to the landowner who executed the easement.

III. Responsibility in case of failure.

The Federal Government is not legally responsible in event of failure of works of improvement. There is no present authority for Federal funds to be used for reconstruction or repair costs in the event of such failures. It is accordingly highly essential that a sufficient and effective plan of maintenance be arranged.

Exhibit A

EASEMENT

THIS INDENTURE, made this _____ day of _____, 19_____,
by _____, hereinafter referred to
as the Landowner, and _____ of
_____, hereinafter referred to as
the Local Organization,

WITNESSETH THAT:

WHEREAS, The Secretary of Agriculture, United States Department of Agriculture, is authorized by the Watershed Protection and Flood Prevention Act to carry out a program of assistance to local organizations in planning and installing works of improvement for flood prevention or agricultural phases of the conservation, development, utilization and disposal of water, and

WHEREAS, the Local Organization is cooperating in said program for the purpose of installing a project in the _____ watershed, State of _____, in connection with which it desires to secure certain rights in, over and upon the hereinafter described land of the Landowner,

THEREFORE, for and in consideration of One Dollar (\$1.00) and the benefits accruing to the Landowner from the installation of said project, and other good and valuable considerations, the receipt whereof is hereby acknowledged, the Landowner does hereby grant, bargain, sell, convey and release unto the Local Organization an easement in, over and upon the following described land situated in the County of _____, State of _____; to-wit:

1. The Local Organization shall have the right, privilege and authority to use said land for the installation, operation, maintenance and inspection of the following described works of improvement and for the storage of waters that may be impounded by any dam or other reservoir structure described below:
2. The Local Organization shall be responsible for operating, maintaining, and keeping in good repair the works of improvement herein described.
3. The Landowner reserves the right to use said land or any part thereof at any time and for any purpose, provided such use does not interfere with the full enjoyment by the Local Organization of the easement herein conveyed.

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4. This easement shall include the right of ingress and egress at any time over and upon said land and any adjoining land owned by the Landowner..
5. This easement shall include all easements, rights-of-way, rights, privileges and appurtenances in or to said land that may be necessary, useful or convenient for the full enjoyment of the easement herein conveyed.
6. The easement herein conveyed shall be subject to any easements, rights-of-way, or mineral reservations or rights now outstanding in third persons.
7. In the event (a) the works of improvement herein described are not installed on said land within _____ months from the date hereof, or (b) the easement described herein is abandoned, the rights, privileges, and authority granted hereunder to the Local Organization shall be terminated.
8. Special Provisions:

IN WITNESS WHEREOF, the Landowner has executed this instrument on the day and year first above written.

(
(
(_____
(
(
(
(_____

(Certificate of Acknowledgment)

Exhibit B

INSTALLATION PERMIT

The undersigned, _____,
hereinafter called the Landowner, hereby grants permission to
_____, hereinafter
called the Local Organization, for the installation of the following works
of improvement

on the following described lands

subject to the following conditions:

1. Installation of said works of improvement shall be completed within
_____ months from the date of this permit.
2. This permit shall include the right of ingress and egress at any time
over and upon said lands and any adjoining lands owned by the Landowner.

(Date of Permit)

(Signature of Landowner)

SECTION 16

COOPERATION WITH STATE AND LOCAL AGENCIES IN PLANNING AND INSTALLATION

In addition to the sponsoring local organization(s) there are many other State and local agencies and groups which need to be brought into the planning and installation of watershed projects.

The sponsoring local organization(s) must participate actively in each stage in the development of the watershed work plan. They must also be kept currently informed of developments and the need for action with respect to various details of the work.

The Service will work toward the following objectives:

1. Encourage the sponsoring local organization(s) to designate individuals to represent them and to participate in developing the work plan.
2. Assist local people in understanding the objectives of a watershed project and the significant features of the Act.
3. Keep the sponsoring local organization(s) currently informed of important developments and problems encountered in preparation of the watershed work plan. Secure their advice and decisions with respect to important developments and problems.
4. Reach a common understanding regarding:
 - a. Land easements and rights-of-way.
 - b. Water rights.
 - c. Principles of cost-sharing.
 - d. Contractual responsibilities.
 - e. Operation and maintenance.
 - f. Compliance with State laws.
 - g. Cooperation with other agencies.

Many State and local agencies and groups may have an interest in and facilities for contributing to the development of the work plan and the installation of works of improvement. The Service will maintain harmonious and helpful relations with these groups and organizations. These agencies and groups should be encouraged to cooperate with the sponsoring local organization(s) and the Service in furthering the watershed objectives.

The State Conservationist is responsible for making available a list of those State and local agencies and groups who might cooperate or participate in planning and installing watershed projects.

SECTION 18

COOPERATION WITH OTHER FEDERAL AGENCIES IN PLANNING

The Act authorizes the Secretary of Agriculture to obtain the cooperation and assistance of other Federal agencies in preparing plans for works of improvement. It requires him to submit any such plan which includes reclamation or irrigation works or which affects public or other lands under the jurisdiction of the Secretary of the Interior to the Secretary of the Interior for his views and recommendations, and any such plan which includes Federal assistance for floodwater detention structures to the Secretary of the Army for his views and recommendations, respectively, at least sixty days prior to transmission of the plan to the Congress through the President.

Executive Order 10584 makes the Secretary of Agriculture responsible for notifying the Secretary of the Interior, the Secretary of the Army, and other concerned Federal agencies, in writing, of all approvals or disapprovals of applications for planning assistance and of his decision to initiate any survey or field investigation involving water-resource development work; for furnishing the Federal agencies concerned with appropriate information regarding the scope, nature, status, and results of such survey or investigation; for submitting plans for works of improvement to the Federal agencies concerned for review and comment; and for consulting with the Tennessee Valley Authority with respect to any survey or field investigation involving water-resource development work in the Tennessee Valley.

Department policy provides that work undertaken and performed under the Act is to be to the fullest possible extent in harmony with related work of other Federal agencies; that there shall be the fullest possible cooperation with other Federal agencies which have undertaken or may undertake responsibilities in the field of land and water management; and that the Administrator of the Soil Conservation Service will inform and cooperate with other Federal agencies in providing authorized Federal assistance.

The Administrator of the Soil Conservation Service will notify, in writing, the Secretaries of the Interior, Army, Health, Education & Welfare, Commerce, and Labor, and the Chairman of the Federal Power Commission of all approvals or disapprovals by the Administrator of applications from qualified local organizations for planning assistance.

Customary procedure of the Inter-Agency Committee on Water Resources will be followed in notifying appropriate field representatives of concerned Federal agencies when an investigation or survey is to be initiated in connection with preparation of a plan for works of improvement for a watershed following approval of an application for assistance from a local organization. The State Conservationist will advise concerned Federal agency field representatives, in writing, of his intent to start preparation of a plan for works of improvement for each such watershed in his State, furnishing brief information about the scope and nature of the investigation, asking to be advised in writing within 30 days of any interest the other Federal

agency may have in the watershed and plan, and inviting the submission of or reference to data the other agency may have or know of that might be pertinent to or useful in preparing the plan.

The State Conservationist will afford local representatives of interested Federal agencies every reasonable opportunity to participate in and contribute to work plan preparation so as to help assure that works of improvement included in work plans are to the fullest possible extent in harmony with related work of other Federal agencies. To the extent that other Federal agencies responsible for administration of Federal lands in a watershed do not have funds available for such participation, they may be provided by the State Conservationist from planning funds available to him under the Act. Completed work plans will not be submitted to field representatives of interested Federal agencies for formal comment prior to their transmittal to the Administrator, SCS. However, drafts of these work plans should be reviewed informally with field representatives of other interested Federal agencies.

The same procedure will be followed in any instance when the Department initiates an investigation and survey under the provisions of Section 6 of the Act, except that copies of each completed report will be made available to field representatives of other concerned Federal agencies for comment sixty days prior to transmittal of the report to the Washington office and copies of their comments will accompany the report.

The Administrator of the Soil Conservation Service will transmit to the Secretaries of the Interior, Army, and other interested Federal agencies copies of each work plan for their views and comments sixty days prior to transmission of the plan to the Congress through the President. In each case where a work plan includes reclamation or irrigation works or which affects public or other lands under the jurisdiction of the Secretary of the Interior or which includes Federal assistance for floodwater detention structures, the transmittal letters to the Secretaries of the Interior and of the Army, respectively, will call attention to the fact and will point out that the plan is being transmitted in accordance with the provisions of the Act. Copies of any comments received within sixty days will accompany the plans when transmitted to the Congress through the President.

The State Conservationist will consult with the Tennessee Valley Authority with respect to development of a plan for works of improvement for any watershed located within the Tennessee Valley at the time of initiation of the investigation and survey and subsequently as seems appropriate.

When technical services of a special nature not available within the Soil Conservation Service are needed, they may be obtained, if available, under appropriate memorandum of agreement with specialist agencies such as the U. S. Geological Survey, Weather Bureau, or Agricultural Research Service. Such technical services will be paid for by the Service from funds available under the provisions of the Act.

SECTION 19

OPERATION AND MAINTENANCE

A. Maintenance Responsibility.

The responsibility for operating and maintaining structural measures and works of improvement on non-Federal lands will rest with the sponsoring local organization regardless of any arrangements made with other parties for carrying out the operation and maintenance plan.

Land treatment measures installed on non-Federal lands will be operated and maintained by landowners and operators under agreements with soil conservation districts where they exist, and in non-district areas under such agreements as may be acceptable to the Administrator, Soil Conservation Service. Land treatment measures installed on Federal lands will be operated and maintained by the agency administering such lands. Structural measures, and works of improvement for agricultural phases of the conservation, development, utilization, and disposal of water installed on non-Federal lands will be operated and maintained under terms of the agreements provided for below.

The responsibility for operating and maintaining structural measures, and works of improvement for agricultural phases of the conservation, development, utilization, and disposal of water on Federal lands will rest with the agency administering such lands. The cost will be borne by the Federal Government, or by local interests, or jointly, as determined by mutual agreement in accordance with the accrual of benefits to the respective participants. This should be covered by the use of an agreement between the Federal agency administering such lands and the sponsoring local organization(s) or maintenance organization.

B. Assumption of Maintenance.

The assumption of the operation and maintenance of structures and works of improvement should take place immediately following acceptance of the work from the contractor. A job may be completed with the exception of small items such as seeding or sodding which completion might require an extended period of time. In such cases the maintenance should be assumed by the sponsoring local organization subject to the completion of such work.

(1) Project constructed by sponsoring local organization.

No action need be taken in those cases where works of improvement are constructed under a contract awarded by a sponsoring local organization and that organization performs the maintenance work. The sponsoring local organization has responsibility for maintenance as soon as the contract is completed.

- (2) Project constructed by sponsoring local organization - maintenance by another local organization.

In those cases where the maintenance organization is other than the sponsoring local organization it will be necessary that arrangements be made to have the sponsoring local organization notify the maintenance organization immediately following the acceptance of the work from the contractor. This also may be done prior to the completion of such small items as seeding or sodding, but subject to the completion of such work.

Copies of the letters transferring the assumption of maintenance should be furnished the State Conservationist for distribution to the Area Conservationist, Engineering and Watershed Planning Unit, and the Administrative Services Division in Washington.

C. Maintenance agreements.

- (1) Specific maintenance agreements should be incorporated in a supplement to the watershed work plan and in all cases the agreements must be executed prior to the issuance of invitation to bid.

There will be no prescribed form for such agreements but they should include the following:

- a. A short description of the structures and other installations that will be maintained.
- b. Inspections. How often the sponsoring local organization will make periodic and special inspections and a list of items to be inspected. Show the technical assistance the Service can make available for assisting with these inspections.
- c. Estimated annual costs. This should be based on present construction costs and should be so stated. These cost estimates may be listed according to kinds of work or as a percentage of the total construction cost.
- d. Statement of equipment and materials normally required for the maintenance work.
- e. Statement of method the sponsoring local organization will use for doing the maintenance work, such as by contract, by force account with its own equipment, etc.
- f. Statement of how funds will be obtained and provided for maintenance work.
- g. Statement covering the right of free access of government representatives to inspect facilities at any time.

- (2) When the operation and maintenance is to be performed by an organization other than the sponsoring local organization, an agreement satisfactory to the Service must be executed by the sponsoring local organization and the maintenance organization. Such agreements should contain substantially the same conditions as required under "C" "(1)", except the technical assistance to be made available by the Service under "c" "(1)" "b". The agreement should be incorporated in a supplement to the watershed work plan before the invitation to bid is issued.
- (3) Distribution of maintenance agreements.

Sufficient copies of the maintenance agreements described under "C" "(1)" and "C" "(2)" above should be prepared to provide distribution to all recipients of the watershed work plan and one copy to the Administrative Services Division in Washington.

D. Inspections.

Inspections will be made by the sponsoring local organization as frequently as necessary, at least annually, to determine maintenance needs. The Service will participate in maintenance only to the extent of (1) furnishing technical assistance to aid in inspections and (2) furnishing technical design information necessary for the maintenance program. The Service is responsible for making periodic checks at least annually, to see that adequate maintenance is being performed according to agreements. It is desirable that these inspections be made with representatives of the organization(s) responsible for maintenance, but they can be made separately if necessary. When the maintenance program is not being carried out according to the agreement, the matter will be brought to the attention of the sponsoring local organization by the State Conservationist.

E. Inspection Reports.

The sponsoring local organization will maintain a record of maintenance inspections and maintenance operations and have it available at all times for inspection by Soil Conservation Service personnel.

The State Conservationist will designate the employee(s) to make the government inspections. This employee will prepare a written narrative report setting forth his findings. Copies of this report should be furnished to the State Conservationist for distribution to the Area Conservationist, the Engineering and Watershed Planning Unit and the Administrative Services Division in Washington.

SECTION 20

FIELD COST ESTIMATES, BUDGETING, FUND ALLOCATION AND MANAGEMENT, AND DISBURSEMENTS

Field Cost Estimates and Budgeting

Field estimates are prepared by responsible field offices to show field operations planned for a specific fiscal year. Table 1 of the work plan is designed to provide a record of these costs and to schedule planned operations. There is required to be shown the kinds and amounts of work and activities planned for installation by fiscal years and total project, the estimated cost of such work and activities, the year in which funds are needed to accomplish the plan, and the expected source of the funds necessary to accomplish it. The extent of participation in the project by the Federal Government and non-Federal interests are shown separately and in total on Table 1 of the work plan.

The costs of planning services will be obligated against funds allocated for planning and, therefore, will not be shown on Table 1 of the work plan. Planning services cover all assistance and services provided for surveys and investigations and preparation of work plans prior to providing assistance in the installation of works of improvement. Planning services also include costs for collection and analysis of basic data, economic analysis, and river basin coordination studies.

Budget estimates submitted to the Department, the Bureau of the Budget, and the Congress must be based on plans of work that it is reasonably certain can be accomplished if the funds requested are made available. These annual budget estimates are generally required to be submitted by the Service to the Department during the latter part of the fiscal year. They will include:

- (a) Statement of obligations of the current fiscal year as can best be estimated at the time.
- (b) An estimate for the succeeding year based on the best available information as to the action the Congress will take on the succeeding year's budget which is currently under consideration.
- (c) An estimate for the next following year.

The field cost estimates shown in Table 1 are used in the budget preparation process to determine what work could reasonably be expected to be done in the "budget" year. For example, field cost estimates for the fiscal year 1957 were due in the Washington office in the spring of 1955. They are to be prepared jointly by the Federal agencies concerned and show the planned use of Federal funds on specific projects.

Field estimates are subject to change, often on short notice, in developing the Service and Departmental budgets. Operational changes also occur in the field. Funds appropriated frequently do not agree with the budget originally submitted. These changes and differences require the rescheduling of planned work and corresponding changes in Table 1 of the watershed work plan. Therefore, the preparation of field cost estimates is a continuing process throughout the life of a project which requires that Table 1 be kept current by periodic revision. It is believed that annual revision, except in unusual cases of major change in planned activities, will be adequate for this purpose. The annual revision will be made after firm obligations for the past fiscal year are available from the Washington office.

Annual Revision of Table 1

When a work plan has been prepared and Table 1 is completed, it is a table of estimates. After each fiscal year of installation of the project has passed and when the annual revision of Table 1 is made, it will show quantities and costs for: (1) Structural Measures for Flood Prevention, Drainage, Irrigation and other Agricultural Water Management Measures for which funds were obligated and (2) Land Treatment Measures actually installed. It will also show costs of Technical Assistance, Installation Services and other Costs.

Quantities of structural measures will be reported only for the fiscal year in which funds are first obligated. Funds required in succeeding years to complete any structure previously reported will be shown in the fiscal year in which they are obligated.

The revision for the year just passed will be shown on a Standard Table 1 form with the column heading "No. to be Applied" changed to "No. applied or Under Contract."

This procedure will keep the work plan current so that at the end of the installation period Table 1 will have changed from a table of estimates to a table of accomplishments.

Allocation and Management of Funds

At the beginning of each fiscal year funds appropriated are allocated by specific projects after review of the watershed work plan and Table 1 for each project and consideration of amount of funds appropriated in relation to the budget request, carry-over funds available, progress made to date, priority category of work planned for installation, fund needs for large individual construction jobs, etc. Instructions for preparing Table 1 of the work plan (section 23) provide for the addition of all estimated indirect Federal costs to the proper Federal total and distribution to the appropriate item. Funds for each approved project will be allotted to the State Conservationist of the State in which the project is located after deduction of funds necessary to finance the appropriate share of Washington office and EWP Unit expense. Any unused funds thus withheld will subsequently be allotted to the States.

The State office will make appropriate charges to each project for cost of salaries and expenses of all project, area, and program staff specialists incurred in working directly for the benefit of the project. Appropriate charges will also be made for State administrative costs incurred in servicing the projects, such as budgeting, accounting, personnel services, contracting and related work. Cartographic services for the projects are procured on a reimbursable basis.

The Engineering and Watershed Planning Units will maintain records by project of the obligations of their Watershed Protection and Flood Prevention (Public Law 566) funds used for technical assistance and installation services. These records will be summarized for the Washington office at the end of the fiscal year, and reported by project on the Annual Budget Report. These costs will be added to the pro-rata distribution by projects of the Washington office costs and other Washington maintained accounts, and the total amount furnished to the State office by the Budget and Finance Division. These overhead costs should be distributed, on a judgment basis, by the State to the Technical Assistance and Installation Services items in the annual revision of Table 1. These figures combined with the obligations at the State level will be the total project cost for that fiscal year.

It is the objective of the Service to use all of its appropriated funds in the most efficient and effective manner possible. The greatest possible advancement of the total program should be made each fiscal year and the carry-over of funds to following fiscal years kept to a minimum. Sound fund management requires a periodic review of the planned installation program and analyses of the use of available funds. This will require periodic reports showing:

1. The need for additional funds to install the work planned for the current fiscal year.
2. Funds that are not needed to install the work planned for the current fiscal year and available for withdrawal.
3. Additional funds that could be used to install measures planned for the next fiscal year, for which plans and specifications are now available and that could be contracted if such funds were available.

Changes in items 1 and 2 above may result from differences between cost estimates and allocated fund, cost estimates and contractors bids, etc.

Funds available and not required for work planned for installation in a specific fiscal year should be made available immediately for withdrawal and use elsewhere to advance the program. Small amounts withheld on one project may be just the additional amount needed to award a contract on another project.

Narrative Reports to Support Budgets

The Washington office has a great need for current narrative statements on watershed activities for use in presenting agency budget estimates to the Department and the Bureau of the Budget, and for answering questions related to the need for and availability of funds referred to the Service by members of the Congress. Narrative statements are particularly desired about such activities as:

1. Unusual progress in establishing the land treatment measures.
2. Unusual progress in obtaining land, easements, and rights-of-way.
3. Outstanding examples of local cooperation in cost-sharing.
4. Outstanding accomplishments in installing the structural part of the project, such as the awarding of contracts for all structures scheduled for a fiscal year, the numbers and kinds of structures installed, and the benefits provided.
5. Exceptional examples of the effectiveness of the project, such as observations and evaluations made after unusual storms.
6. Outstanding photographs of flood prevention and land-treatment measures.

As information becomes available on items 1 to 6 above, it should be submitted by the State Conservationist.

Disbursements

Where the construction contract is awarded by the Soil Conservation Service, the Service will make the entire payment to the contractor, such payment to be from funds provided by the sponsoring local organization prior to the award of the contract and placed in a trust fund account by the Soil Conservation Service for direct expenditure by it, and from Federal appropriated funds available to the Soil Conservation Service.

Where the local organization awards the construction contract, such organization is responsible for the entire direct payment to the contractor. On the basis of a specifically committing cooperative agreement the Service will obligate funds for its agreed share of the cost of the undertaking and make payments to the local organization as segments of the work are completed in accordance with partial payment terms of the construction contract, provided such completed segments have been accepted as satisfactory by the Service representative (sec. 13).

Where the Service agrees to the installation of the works of improvement by force account, through the use of the local organization's facilities, the agreement may commit the Soil Conservation Service to make payments to such organization for accepted segments of the work in a manner similar to that indicated above where the organization awards a contract for the construction.

Federal funds will be made available to the local organization under any of the conditions stated above, only for actual construction operations and are not to be used by the organization to defray its cost of awarding and administering contracts.

Form SCS-49a "Contract Payment Estimate" rather than Standard Form 1034 voucher or payee's invoice will normally be used in making payments to the applicable local organization as specified in the Agreement. The form must contain the following certificate signed by an authorized official of the organization to whom payment will be made.

"I certify that the above bill is correct and just and that payment therefor has not been received."

Each form, as submitted to the State office for payment, should bear reference to the cooperative agreement between the Soil Conservation Service and the local organization and be administratively approved by the Service representative accepting the work as satisfactory.

Watershed Cost Data and Project Analysis

"Watershed Cost Data" summaries of totals from Table 1 and a "Watershed Project Analysis" will be prepared for each work plan and submitted to the Washington office concurrently with it.

The "Watershed Cost Data" forms will be prepared for each corresponding Table 1 and revision. (The first three "Fiscal Years" the "Remaining to be Done" and "Total Project.")

The original and one copy of each cost data sheet and the project analysis will be required by the Washington office. A copy of each document should be provided to the E&WP Unit and additional copies prepared as required by the State office.

Instructions for compiling the above are as follows:

Watershed Cost Data (PL 566): Heading "For: _____":
Show the "when" or year and total.

Heading "(Watershed Name or Summary Identification)": Enter the name of the project and State.

Column (A): Lines 3, 7, 10, 13, 16, 22 and 29 are left blank and will be used to tabulate the estimated cost items of any other Federal agency that is indicated on Table 1 of the work plan.

Column (B) "Federal" and (C) Non-Federal": Enter here the appropriate item from table 1 of the work plan. If the item does not appear in table 1, the line will be left blank.

Column (D) "Total": This is a line by line addition of columns (B) and (C).

"Date": Enter the date on the cover of the watershed work plan. When Table 1 is revised, this table will also be revised and be dated the same as the revised Table 1.

The Watershed Project Analysis will be prepared primarily from total sheet of the Watershed Cost Data Form:

Heading "(Watershed Name or Summary Identification)": Enter the name of the project and State.

"Est. Federal Cost": From Column (B), line 26 or 30.

"Federal Costs": SCS from Column (B) line 27; F.S. from Column (B) line 28; Other from Column (B) line 29 of the Watershed Cost Data Form. % SCS is Federal SCS cost divided by total Federal cost and multiplied by 100. The same method is used to compute %F.S. and % Other.

"Cost Distribution: Watershed Protection & Flood Prevention": % of Total Land-Treatment Fed.; this item is computed by dividing the item from Column (B) line 4 by the item from Column (D) line 4 of the Watershed Cost Data Form, and multiplying by 100. The other items in this section are computed in a like manner using the appropriate items from the Watershed Cost Data Form.

"Distribution of Federal Cost in % of Total Federal": Land-Treatment; this item is computed by dividing the item from Column (B) line 4 by the item from Column (B) line 26 of the Watershed Cost Data Form, and multiplying by 100. The other items in this section are computed in similar manner.

"Cost of Measures on Fed. Land" Fed. & Non-Fed. Cost: When funds are used for the installation of measures on Federal lands, these estimated costs, as reflected in the work plan, will be entered in the appropriate spaces provided.

"Cost per Sq. Mi. Fed.: Total": Land-Treatment, Fed: This item is computed by dividing the item from Column (B) line 4 of the Watershed Cost Data Form by the Total Area of the watershed in square miles. Land-Treatment Total: is Column (D) line 4 divided by the total area of the watershed. The other items in this section are similarly computed, using at all times the total area of the watershed.

"Date": Same as for the Watershed Cost Data.

WATERSHED COST DATA (PL 566)

For: _____

(Watershed Name or Summary Identification)

	FEDERAL	NON-FEDERAL	TOTAL
(A)	(B)	(C)	(D)
<u>LAND TREATMENT</u>			
1. Land Treatment SCS			
2. Land Treatment FS			
3.			
4. Total Land Treatment			
<u>STRUCTURAL MEASURES</u>			
5. Flood Prevention SCS			
6. Flood Prevention FS			
7.			
8. Total Flood Prevention			
9. Drainage SCS			
10.			
11. Total Drainage			
12. Irrigation SCS			
13.			
14. Total Irrigation			
15. Other Agricultural Water Management - SCS			
16.			
17. Total Other Agricultural Water Management			
18. Total Agricultural Water Mgmt.			
19. Total Construction Cost			
<u>INSTALLATION SERVICES</u>			
20. Total SCS			
21. Total FS			
22.			
23. Total Installation Services			
24. Other Costs			
25. Total Structural Measures			
26. GRAND TOTAL			
<u>SUMMARY</u>			
27. Total SCS			
28. Total FS			
29.			
30. TOTAL			

Date _____

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WATERSHED PROJECT ANALYSIS (PL 566)

(Watershed Name or Summary Identification)

Est. Federal Cost \$ _____

Federal Costs:

SCS	\$ _____	F.S.	\$ _____	OTHER	\$ _____
%SCS	_____	%F.S.	_____	%OTHER	_____

Est. Non-Federal Cost \$ _____

Cost Distribution: Watershed Protection & Flood Prevention

	Fed.	Non-Fed.
% of Total Land Treatment	_____ %	_____ %
% of Total Flood Prevention	_____ %	_____ %
% of Total Drainage	_____ %	_____ %
% of Total Irrigation	_____ %	_____ %
% of Total Other Agr. Water Mgmt.	_____ %	_____ %
% of Total Agr. Water Management	_____ %	_____ %
% of Total Construction Cost	_____ %	_____ %
% of Total Installation Services	_____ %	_____ %
% of Total Other Costs	_____ %	_____ %
% of Total Structural Measures	_____ %	_____ %
% of Grand Total	_____ %	_____ %

Distribution of Federal Cost in % of Total Federal

Total Land Treatment	_____ %
Total Flood Prevention	_____ %
Total Drainage	_____ %
Total Irrigation	_____ %
Total Other Agr. Water Mgmt.	_____ %
Total Construction Cost	_____ %
Total Installation Services	_____ %
Total Other Costs	_____ %

	Cost of Measures on Fed. Land		Cost Per Sq. Mi.	
	Fed. Cost	Non-Fed Cost	Fed.	Total
Total Land Treatment				
Total Flood Prevention				
Total Drainage				
Total Irrigation				
Total Other Agr. Water Mgmt.				
Total Construction Cost				
Total Installation Services				
Total Other Costs				

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ORGANIZATIONAL AND FUNCTIONAL RESPONSIBILITIES

The State Conservationist is responsible for all Service activities in his State for fulfilling the Service's responsibilities under the Act. The following functional responsibilities are assigned for each phase of project development from the application for planning assistance to the completion of the watershed work plan. Where a watershed is located in 2 or more states, the State Conservationists will mutually agree as to the State Conservationist to be responsible for conducting the field examination upon approval of the application, the Administrator will designate the State Conservationist to be responsible for providing the Service assistance in the preparation of the watershed work plan. Close liaison will be maintained with other State Conservationists involved.

Applications for Assistance

The State Conservationist is responsible for cooperating with the authorized State agency or the Governor in developing standard application forms and procedures for submitting and processing applications in the State. Application forms may be obtained at any Service office, such as Work Unit and Area Offices.

Soil Conservation Service personnel may provide such factual information as is readily available to assist the local organization(s) in preparing applications, but will not assist in the actual preparation of applications. Service assistance at this stage should be held to a minimum since the application should reflect the local organization's own analysis of its problems and needs.

The State Conservationist is responsible for arranging for the conduct of and reporting on the field examination. This includes arranging for needed assistance from the Engineering and Watershed Planning Unit, participation of the Area Conservationist and cooperation of the State agencies and any other interested agencies. The Work Unit Conservationist will assist the field examination party as instructed by the Area Conservationist. Where a Watershed Work Plan Party exists, this party and the Area Conservationist, with technical guidance from the State Program Staff and such assistance as may be necessary from the Engineering and Watershed Planning Unit and the Work Unit Conservationist, may be assigned the responsibility of conducting and reporting on field examinations.

The State Conservationist is responsible for providing copies of the field examination report to the authorized State agency and others participating in the field examination, and for obtaining priority recommendations from the authorized State agency for approval of applications. He is also responsible for submitting all approved applications, together with the field examination report and other supporting information, to the Administrator, including his recommendations and those of the State agency for priority of approval. (Sec. 3)

Final approval and establishment of national priorities for providing assistance in work plan development is the responsibility of the Administrator.
(Sec. 3)

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The State Conservationist is responsible for notifying the local organization(s) and all other participating agencies of the action that is taken by the Administrator on applications for assistance.

Watershed Work Plans

The State Conservationist is responsible for notifying the local organization(s) and all other participating agencies that the Service has resources available to provide assistance in the development of a watershed work plan.

The Area Conservationist and the Work Unit Conservationist, with such assistance as is necessary from the Soil Conservationist on the State Program Staff are responsible for working with the local organization(s) and keeping it informed concerning all phases of work plan development. The Area Conservationist is responsible for coordinating watershed planning activities where two or more work units are involved.

The Soil Conservationist on the State Program Staff, in collaboration with the Area Conservationist, is responsible for making arrangements for the services of the watershed work plan party, other members of the State program staff, plant technologists, and specialists from the engineering and watershed planning unit.

The Watershed Work Plan Party will assist the Soil Conservationist on the State Program Staff and the designated representatives of the sponsoring local organization(s) in preparing a work outline for the watershed work plan, including the plans for the necessary hydrologic, sedimentation, geologic, and economic surveys, investigations, and analyses. It also assists the local organization(s) in incorporating into the watershed work plan all aspects of watershed protection and flood prevention, including the consideration of recommendations of all participating agencies. The State Program Staff has the responsibility for the technical soundness of the work plan in their respective fields. The Work Unit Conservationist is responsible for providing assistance in developing the land treatment phase of the plan on non-Federal land. The State Conservationist makes arrangements for participation by other Federal agencies, such as the Forest Service, Fish and Wildlife Service, Bureau of Land Management, and Bureau of Indian Affairs, and the state agencies concerned.

The Area Conservationist (with such assistance as may be necessary) represents the Service in reaching tentative agreement with the local organization(s) on the watershed work plan developed. When the complete plan is tentatively agreed upon, the Area Conservationist transmits the plan to the State Office.

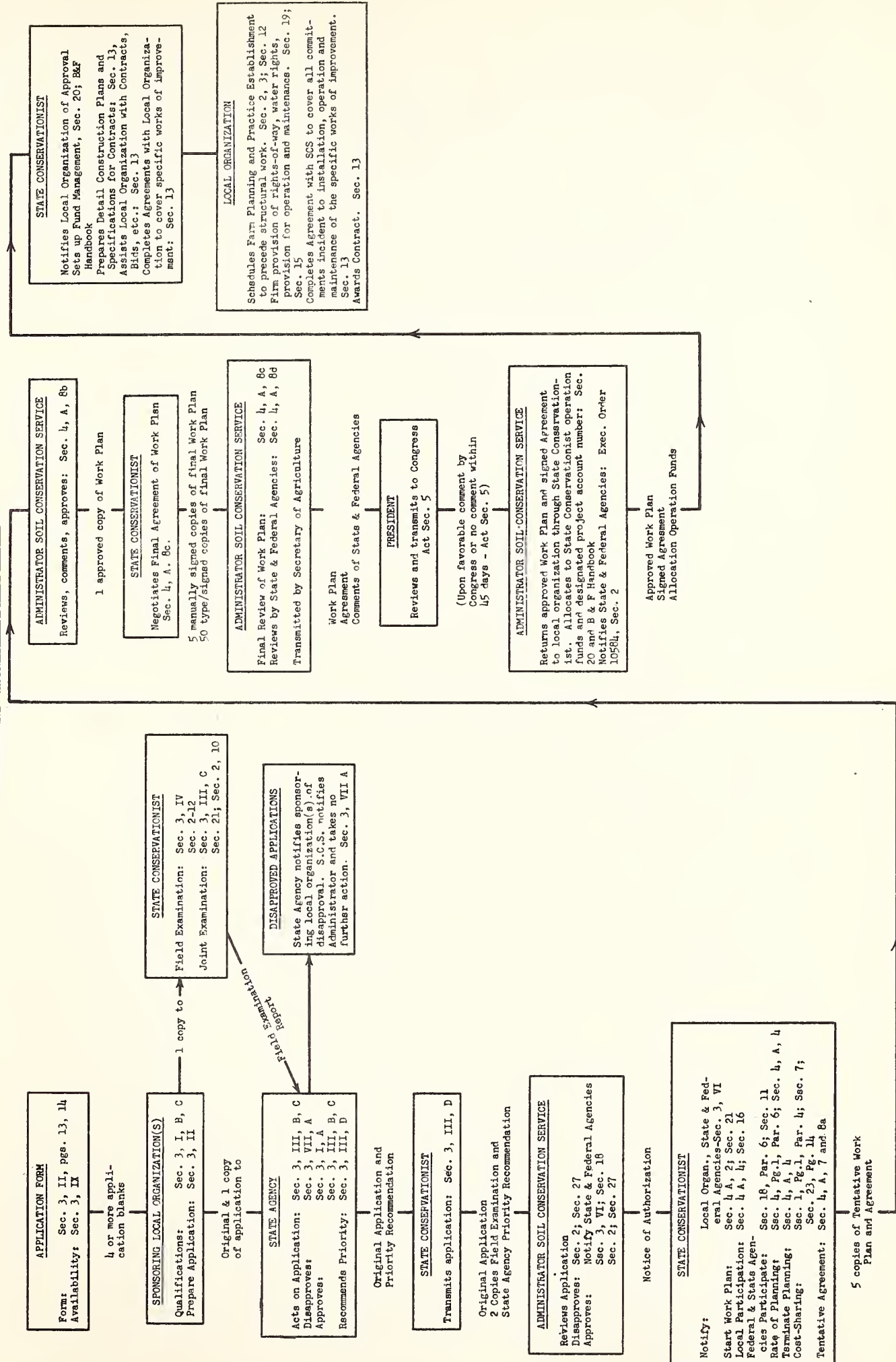
The State Conservationist is responsible for reviewing the watershed work plan and arranging for a review by the Engineering and Watershed Planning Unit, and the Washington Field Plant Technologists, and an informal review by field representatives of other concerned Federal and State agencies. The Engineering and Watershed Planning Unit and the Washington Field Plant Technologists are responsible for technical concurrence in the watershed work plan. The State Conservationist is responsible for making corrections in the plan necessitated by such reviews and negotiating final agreement with the local organization(s) and for submitting the final plan to the Administrator for approval.

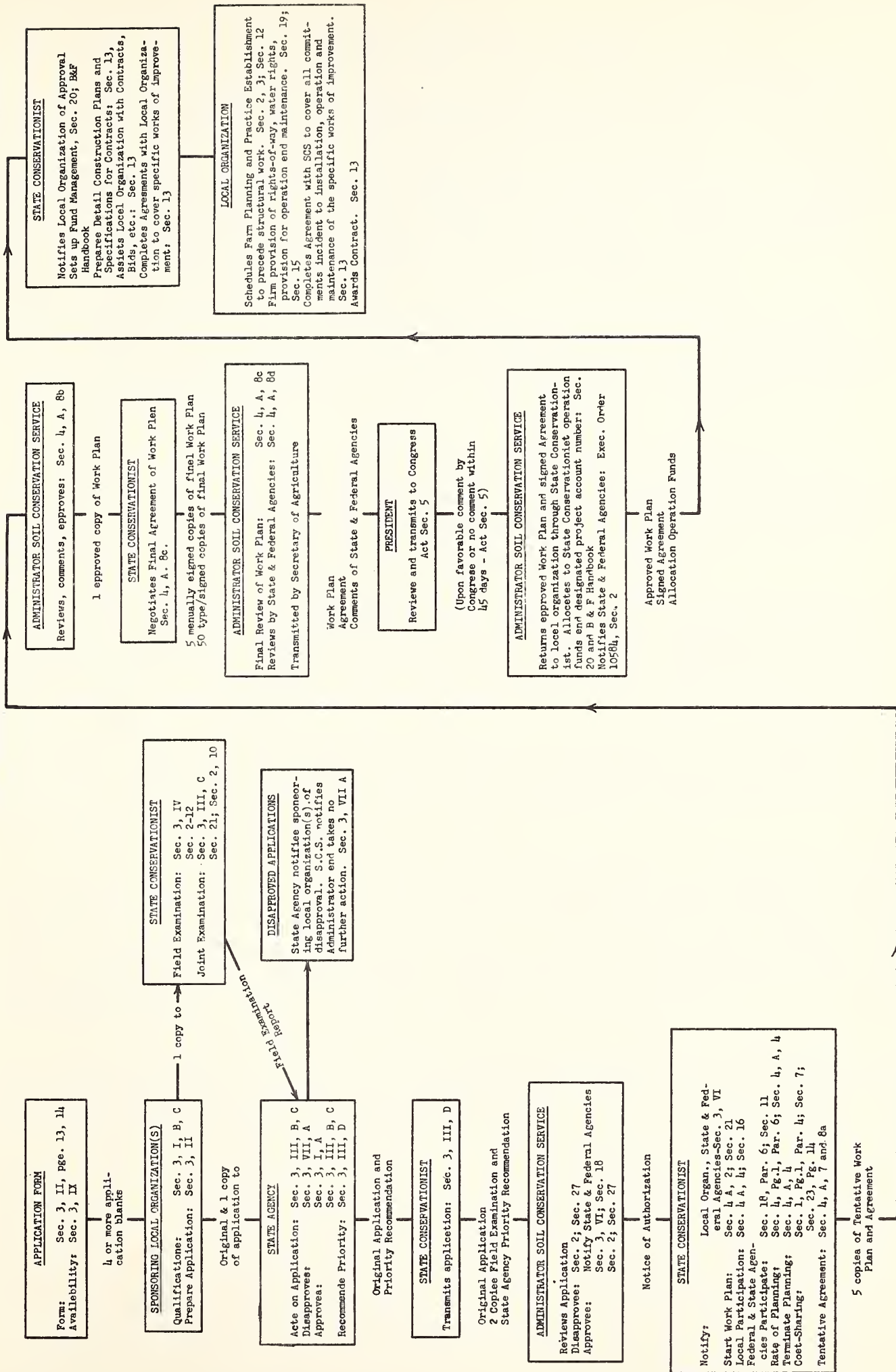
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The Administrator is responsible for approving all plans, for obtaining reviews by all concerned Federal agencies, and for recommending final approval by the Secretary. Upon approval, the Secretary submits the plan to the Congress through the President.

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WATERSHED WORK PLAN - SAMPLE

The following sample or guide watershed work plan is provided to assist in the preparation of watershed work plans under the Act.

This sample was prepared to illustrate an application of the principles set forth in Executive Order No. 10584, the policy statement of the Secretary of Agriculture, and the policies and criteria of the Soil Conservation Service as set forth in this Handbook. Also, recognition has been given Circular A-47, Bureau of the Budget, in the preparation of this sample.

It is intended that watershed work plans developed under the Act for the watersheds widely scattered throughout the country, reflect general uniformity in concept and format, both administrative and technical, in the accomplishment of the Watershed Protection and Flood Prevention phase of the total soil and water conservation job.

The watershed work plan will describe the specific works of improvement desired by the local people which meet legal and policy requirements and technical and economic standards, and will show an appraisal of results expected, estimates of cost, cost-sharing arrangements, and how the work will be accomplished.

All works of improvement planned and installed under authority of this Act shall be designed and constructed in conformity with the Service standards, procedures and job classification and approval systems established for use in the State and in conformance with the standards of the land managing agency upon whose lands the works will be installed.

The sample watershed work plan does not give an example of the narrative material but does indicate the detail which is to be covered under the several headings. The inclusion of any additional information needed or desired by local interests is optional.

The narrative, tables, and figures shown in the sample are needed for the use of the Washington office, the Secretary of Agriculture, the Congress, and the President. When it is apparent that any table or figure is not applicable in a particular watershed work plan, the table or figure should be omitted rather than be included with no entry made. When any table or figure is omitted, the remaining tables or figures should be numbered consecutively within each watershed work plan.

As for the narrative, the use of additional tables and figures is optional. When selecting such illustrative materials, one should investigate and consider the cost of reproducing such materials.

WATERSHED WORK PLAN

CHARLES CREEK WATERSHED

Able and Baker Counties, Middlestate

Prepared under the authority of the
Watershed Protection and Flood Prevention Act

(Public Law 566, 83rd Congress, 68
Stat, 666)

(month and year)
date

4/19/55

WATERSHED WORK PLAN

AGREEMENT

between the

(name of local organization)

(name of local organization)

(name of local organization)

STATE OF _____

and the

SOIL CONSERVATION SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

Whereas, application has heretofore been made to the Secretary of Agriculture by

(name of local organization)

and

(name of local organization)

(name of local organization)

State of _____, hereinafter referred to as the local organization for assistance in preparing a plan for works of improvement for the _____ Watershed, State of _____, under the authority of the Watershed Protection and Flood Prevention Act (Public Law 566, 83rd Congress, 68 Stat, 666); and

Whereas, the responsibility for administration of the Watershed Protection and Flood Prevention Act has been assigned by the Secretary of Agriculture to the Soil Conservation Service, hereinafter referred to as the Service; and

Whereas, there has been developed through the cooperative efforts of the local organization and the Service a mutually satisfactory plan for works of improvement for said watershed, designated as the watershed work plan for _____ Watershed, State of _____, which watershed work plan is annexed to and made a part of this agreement; and

Whereas, the watershed work plan describes the watershed and its problems, and sets forth a plan for works of improvement including a schedule of operations, the kinds and quantities of measures to be installed, the estimated cost, cost-sharing arrangements, maintenance and other responsibilities of those participating in the project, and economic justification for installing, operating and maintaining the works of improvement; and

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Whereas, the Watershed Protection and Flood Prevention Act provides (a) that the local organization and the Secretary of Agriculture shall agree on the watershed work plan prior to participation by the Secretary of Agriculture in the installation of the works of improvement as set forth in said plan, and (b) that, at least forty-five days (while Congress is in session) before such installation involving Federal assistance is commenced, the watershed work plan and the justification therefor shall be transmitted by the Secretary of Agriculture to the Congress through the President;

Now, therefore, in view of the foregoing considerations, the local organization and the Secretary of Agriculture, through the Service, hereby agree on the watershed work plan, and further agree that the works of improvement as set forth in said plan will be installed, operated, and maintained substantially in accordance with the terms, conditions, and stipulations provided for therein.

It is further understood that this agreement does not constitute a financial document to serve as a basis for the obligation of Federal funds, and that financial and other assistance to be furnished by the Service in carrying out the watershed work plan is contingent on the appropriation of funds for this purpose and on the execution of supplemental agreements setting forth the cost-sharing arrangements and other conditions that are applicable to specific works of improvement.

It is further agreed that the watershed work plan may be amended or revised, and that this agreement may be modified or terminated, only by mutual agreement of the parties hereto.

No member of or Delegate to Congress shall be admitted to any share or part of this agreement, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

(name of local organization)

By _____

Title _____

Date _____, 195_____

The signing of this agreement was authorized by a resolution of the governing body of the _____

(name of local organization)

adopted at a meeting held on _____, 195_____.

(Secretary, local organization)

Date _____, 195_____

(name of local organization)

By _____

Title _____

Date _____, 195__

The signing of this agreement was authorized by a resolution of the governing body of the _____

(name of local organization)

adopted at a meeting held on _____, 195__.

(Secretary, local organization)

Date _____, 195__

(name of local organization)

By _____

Title _____

Date _____, 195__

The signing of this agreement was authorized by a resolution of the governing body of the _____

(name of local organization)

adopted at a meeting held on _____, 195__.

(Secretary, local organization)

Date _____, 195__

Soil Conservation Service
United States Department of Agriculture

By _____

Administrator

Date _____, 195__

WATERSHED WORK PLAN

CHARLES CREEK WATERSHED

Able and Baker Counties, Middlestate

Prepared under the authority of the
Watershed Protection and Flood Prevention Act

Prepared by: _____
(name of local sponsoring organization(s))

With assistance by:

U. S. Department of Agriculture, Soil Conservation Service

U. S. Department of Agriculture, Forest Service

(month and year)
date

4/19/55

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Figure 1 - Structure Location Map	
Figure 2 - Problem Location Map	

WATERSHED WORK PLAN

CHARLES CREEK WATERSHED
Able and Baker Counties, Middlestate(month and year)
dateINTRODUCTIONAuthority

The following illustrates the wording that should be used under this heading:

"The Watershed Work Plan for the Charles Creek Watershed, Able and Baker Counties, Middlestate, hereinafter referred to as the Plan will be carried out under the authority of the Watershed Protection and Flood Prevention Act (Public Law 566, 83rd Congress, 68 Stat. 666)."

Purpose and Scope of Plan

The narrative should be developed primarily by the local people with guidance from the Service and others to state specifically what they will accomplish in solving their local land and water management problems by the application of the plan. Also, the local people should state specifically just what problems the plan covers, and the extent to which they plan to solve these problems.

SUMMARY OF PLAN

The narrative should cover such items as what types of works of improvement, such as land treatment measures and structural measures, etc., are planned for the watershed; the time required to accomplish the plan; the total installation cost and the proposed sharing of this cost by the Federal Government and by non-Federal participants; what arrangements have been made for operation and maintenance, and what is the estimated average annual cost of operation and maintenance; also, what are the average annual benefits (dollars) and what are the average annual costs. The Federal and non-Federal cost figures should agree with those figures shown in Table I - Total Summary.

DESCRIPTION OF THE WATERSHED

This material should be in sufficient detail to present a clear and adequate picture of conditions in the watershed for use at local, State and national levels. While first use is at the local level, it is equally important that the Governor or the approved State agency, the Secretary of Agriculture, the President and the Congress, gain a real understanding of the watershed, its problems, and the plan for improvements.

Physical Data

Material should be presented in a narrative, map or chart form, on such physical data items as land (soils, topography, land use, geology, cover conditions, etc.), water (trace water course from source to junction with a major stream

or river, name lakes and approximate areas if they exist in the watershed, principal water uses and sources, flooding, etc.), climate (rainfall, temperatures, growing season, etc.), plus any other physical data significant to the problems and their solution.

Economic Data

Material should include such items as major farm or ranch enterprises, kinds and extent of each; areas of forest, woodland, grassland, wildlife, or public land and extent; accessibility of farms or ranches, forests, and public lands to roads and markets; population - rural and urban; farm sizes and values of farm and ranch land and buildings; farmland, ranchland or forest land ownership; and any other information which will give a picture of the overall economy of the area.

WATERSHED PROBLEMS

Problems resulting from floodwater, erosion, and sediment damages, and methods now used in the conservation, development, utilization, and disposal of water, should be discussed.

Floodwater Damage

The narrative should include the flood problem of the watershed including dates and estimated damages caused by major floods for which data is readily available; area affected by flooding; loss of life from floods; effect of flood hazard on agricultural production; and any other damages caused by floods.

Sediment Damage

The narrative should include the effect of sedimentation on water supplies, reservoirs, channels, drainage and irrigation developments, agricultural lands, urban areas, transportation and other damages caused by sediment.

Erosion Damage

The narrative should include the extent of sheet erosion and channel erosion such as gullies and channel degradation, the sources of sediment causing downstream damage, and the effect of erosion on agricultural production.

Problems Relating to Methods now used in the Conservation, Development, Utilization and Disposal of Water

The narrative should include the problems arising from the needs for drainage, irrigation, and agricultural and urban water supply, and water management for fish and wildlife resources including pollution abatement, and any damages related thereto.

NOTE: Pictures or other illustrative material may be added as desired by local interests. When selecting illustrative material to be used in the report, one should investigate and consider the cost of reproducing such material.

INVESTIGATIONS AND ANALYSES

The narrative is intended to describe how the project was formulated. Describe briefly under such headings as hydraulic, hydrologic, geologic, sedimentation, economic, land use and treatment needs, range site and condition, soil conditions etc., the procedures used and the determinations made of damages and benefits.

Describe briefly how determination was made for various measures and practices included as works of improvement in the plan.

Any standard methods and/or information contained in prepared handbooks or publications used may be referred to by name rather than going into detail. It will not be necessary to include detailed calculations, but such information will be properly filed and available for review locally or for transmittal to the Washington office.

These descriptions may include narrative supplemented by such drawings, maps, charts, etc., as necessary to provide a basis of understanding for those reviewers far removed from the watershed.

EXISTING OR PROPOSED WORKS OF IMPROVEMENT

The narrative should include a brief description of the existing or proposed works of improvement which will affect, or be effected by, the works of improvement included in the plan.

WORKS OF IMPROVEMENT TO BE INSTALLED

All works of improvement included in the plan should conform in terminology to those listed in the "National Catalog of Practices and Measures Used in Soil and Water Conservation", National Records and Report Handbook, Section IV, and also those used by the Forest Service and other participating Federal agencies. Reference should also be made to Section 5 of this Handbook for measures eligible for assistance under the Act.

Land Treatment Measures

The narrative with illustrative material, as desired, should include a statement to specify that land use will be within capabilities and treatment measures will be in accordance with needs and the objectives to be accomplished. Actual land treatment measures will be planned and applied farm by farm and ranch by ranch within the watershed consistent with the watershed work plan. The total estimated cost of installing the significant measures will be shown by item in Table I. The minor land treatment measures will be grouped into one item in the table.

Structural Measures for Flood Prevention

All preliminary designs for proposed structural measures must be based on sufficient field investigations which substantiate the site conditions and schematic designs used for making cost estimates. The proposed measures must be clearly described as to the design and extent of use in order that the plan will be understandable.

The narrative, plus drawings and other illustrative material, should include under each category (Land-Stabilization Measures and Waterflow Control Measures) such information as: name of each measure; for each measure a description and/or an engineering drawing of a typical measure; purpose to be accomplished; the number of each; the total estimated cost of installing the measures (by type); and the annual cost including installation, operation and maintenance. Reference should be made to Table I for quantities of the measures and costs. Reference should also be made to Figure 3 for locations of the measures. In the plan stage, locations and feasibility for sites must be reasonably firm based on adequate field surveys, in order to show where on a map these measures are located. For example, under Land-Stabilization Measures the item "Grade-stabilization measure" should be determined to the extent of a specific number within a specific reach, and so indicated on the map. Determination needs to be made in the plan stage of site location, foundation conditions, height of fill, retarding and sediment and other storage capacity, etc., so location can be shown specifically on the map, and the other data recorded in Table 6 with reference in the narrative to this table.

Works of Improvement for Drainage

The narrative, plus drawings, and other illustrative material should include a description of the drainage measures, purpose to be accomplished, and quantity of the measures; the total estimated cost of installation the measures; and the annual cost including installation, operation, and maintenance. Reference should be made to Table 1 for quantities of the measures and costs.

Works of Improvement for Irrigation

The narrative, plus drawings and other illustrative material should include a description of the irrigation measures, purpose to be accomplished, and quantity of the measures; the total estimated cost of installing the measures; and the annual cost including installation, operation, and maintenance. Reference should be made to Table 1 for quantities of the measures and costs.

Works of Improvement for Other Agricultural Water Management

The narrative, plus drawings and other illustrative material should include a description of the agricultural water management measures, such as water spreading devices, purpose to be accomplished, and quantity of the measures; the total estimated cost of installing the measures; and the annual cost including installation, operation and maintenance. Reference should be made to Table I for quantities of the measures and costs.

Effects of Works of Improvement on Damages and Benefits

The narrative may be supplemented by bar charts and graphs to illustrate a discussion of the expected reduction in flood peaks, area flooded, reduction in annual floodwater and sediment damages (dollars) in total, by types of works of improvement; i.e., land stabilization measures, waterflow control measures, agricultural water management measures and drainage measures, either individually or as inter-related groups of measures; a discussion of benefits due to more intensive use of land; and a discussion of each type of reduction in damage or benefit anticipated.

PROVISIONS FOR OPERATION AND MAINTENANCE

The narrative should state specifically that the local organization(s) have agreed to accept the responsibilities for meeting the following requirements for operation and maintenance of the land treatment and structural measures.

Land treatment measures usually are installed, operated, and maintained by landowners and operators under agreements with soil conservation districts, and outside of districts under such agreements as are acceptable to the Administrator of the Soil Conservation Service. Statement should be made covering how these measures will be handled in the watershed.

Structural measures will need to be covered in more detail. Statements should cover the following points as a minimum, and may need to be expanded to cover special conditions.

1. What structural measures are to be operated and maintained, and by whom.
2. What inspections will be made, how often, and what items will be covered.
3. The estimated annual operation and maintenance costs.
4. Methods for accomplishing the operation and maintenance work (contract, force account, etc.).
5. How funds are to be obtained.
6. Provisions for inspection by Federal representatives.

(Note: Refer to Section 19 for details)

Specific maintenance agreements must be executed prior to the issuance of invitation to bid. This requirement should be understood at the time the watershed work agreement is executed.

COST-SHARING

The narrative should include an explanation of the cost-sharing calculations shown in Tables A to G and a description of the benefits by classes as defined in Section 7.

In determining cost-sharing, it is advisable to consult Section 7 of the Handbook for details. From Table 1 and the narrative, prepare Table A. The benefits shown in Table 4 will be entered on Table B - Step A. From Tables 1 and 2, complete Table B - Step B. The total cost is the sum of the installation cost for structural measures shown in Table 1 and the capitalized value of the operation and maintenance cost for such measures shown in Table 3. Prepare Table C from Table B - Steps A and B. Prepare Table D. Prepare Table E from Table 1.

If an adjustment in cost-sharing is proposed, it should be discussed and shown in Table F. It is important that whenever lack of cost-sharing by non-Federal interests for the installation of measures that provide 1B and 2B benefits is evident, the local organization will be expected to justify this lack of participation.

The proposed cost-sharing is computed in Table G.

Table A - Land Treatment Costs

Type of Cost	Federal Cost	Non-Federal Cost	Total Cost
	(dollars)	(dollars)	(dollars)
<u>Non-Federal Lands</u>			
1. Technical assistance			
2. Installation costs ^{1/}			
3. Total			
<u>Federal Lands</u>			
4. Installation costs			
5. Operation & main- tenance during installation period			
6. Total			
7. Grand total			

^{1/} This cost shall be exclusive of any reimbursement from ACP or other Federal funds.

Table B - Distribution of Average Annual Benefits and Allocation of Construction Costs
by Purposes and by Classes of Benefits

Step A	Distribution of Average Annual Benefits				
	Purpose				
Class of Benefits	Flood Prevention (Dollars) (Percent)	Drainage (Dollars) (Percent)	Irrigation (Dollars) (Percent)	Other Agricultural Water Management (Dollars) (Percent)	Total (Dollars)
Class 1A Benefits					
Class 1B Benefits					
Class 2A Benefits					
Class 2B Benefits					
Total					

Step B	Allocation of Construction Costs			
	Purpose			
Class of Benefits	Flood Prevention (Dollars) (Percent)	Drainage (Dollars) (Percent)	Irrigation (Dollars) (Percent)	Other Agricultural Water Management (Dollars) (Percent)
Class 1A Benefits				
Class 1B Benefits				
Class 2A Benefits				
Class 2B Benefits				
Total				

Table C - Benefits and Allocated Construction Costs

Class of Benefits	Benefits		Allocated Construction Costs	
	(Dollars)	(Percent)	(Dollars)	(Percent)
1. Class 1A				
2. Class 1B				
3. Subtotal - Class 1				
4. Class 2A				
5. Class 2B				
6. Subtotal - Class 2				
7. Total				

Table D - Required non-Federal Costs

Type of Cost	Cost or Appraised Value
	(Dollars)
1. Land, easements and rights-of-way	
2. Water rights ^{1/}	
3. Capacity and facilities for its use on or at the structure for purposes other than flood prevention and features related thereto	
4. Capitalized value of operation and maintenance during expected life of improvements ^{2/}	
5. Cost of administering contracts	
6. Total	

^{1/} Only those water rights acquired in connection with specific project improvements may be included.

^{2/} To be capitalized at the estimated borrowing rate of the organization(s) guaranteeing operation and maintenance.

Table E - Installation Services

Agency	Cost	Total
		(Dollars)
Soil Conservation Service		
Forest Service		
Other		
Total		

Table F - Proposed Adjustment in Federal and non-Federal Costs

Reason for Adjustment	Transfer from Federal to non-Federal (Dollars)	Transfer from non-Federal to Federal (Dollars)
1.		
2.		
3.		
4.		
5.		
Total		

Table G - Proposed Cost-Sharing

Type of Costs	Federal Cost	Non-Federal Cost	Total Cost
	(Dollars)	(Dollars)	(Dollars)
<u>COSTS FOR STRUCTURAL MEASURES</u>			
1. Required non-Federal Costs (Item 6, Table D)			
2. Installation Services (Table E)			
3. Subtotal (Items 1 plus 2) Allocation of Construction Costs			
4. Costs allocated to Class 1A benefits (Item 1, Table C)			
5. Costs allocated to Class 1B benefits (Item 2, Table C)			
6. Costs allocated to Class 2 benefits (Item 6, Table C)			
7. Subtotal (Items 4 plus 5 plus 6) Recommended Adjustments of Construction Costs			
8. Increase or Decrease of Federal Cost (Item 5, Table F)			
9. Increase or decrease of non-Federal Cost (Item 5, Table F)			
10. Subtotal (Items 8 plus 9)			
11. Total Cost Sharing for Structural Measures (Items 3 plus 7, plus or minus 10)			
<u>COSTS FOR LAND TREATMENT MEASURES</u>			
12. Non-Federal lands (Item 3, Table A)			
13. Federal lands (Item 6, Table A)			
14. Subtotal (Item 12 plus 13)			
15. Grand Total Project Cost-Sharing (Item 11 plus 14)			

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GENERAL INSTRUCTIONS FOR PREPARATION OF TABLES

General - This sample or guide watershed work plan has been prepared to illustrate the considerable detail which may result under as many conditions as appear possible to exist in the field. The tables likewise are designed to meet as many conditions as could be anticipated to exist.

It is recommended that only those items or measures which are applicable to the specific watershed work plan be shown in the Tables.

For example: If only works of improvement for flood prevention are the applicable items or measures included in the work plan, the appropriate entries would be made under the proper headings and the entire "Agricultural Phase" portions of the tables would be deleted.

The same applies to any individual item or measure. If drainage measures are not applicable to the work plan, the entire drainage section would be deleted from the Tables.

In using all tables, the indicated headings and items should be used as illustrated in the same order, top to bottom, and left to right, to facilitate all review and summary purposes at the various levels. Further detailed instructions pertaining to each table follow.

INSTRUCTIONS FOR TABLE 1 - ESTIMATED INSTALLATION COSTS

Heading "For:_____". Show the "when" or the year project measures will be installed and Total. This will result in separate Table 1 forms being prepared for the several fiscal years covered by the project and for the Total Project.

For projects of five years (or less) prepare Table 1 for each fiscal year and Total project.

For projects of more than five years prepare separate Table 1 forms for:

- (a) First fiscal year of Project Installation.
- (b) Second fiscal year of Project Installation.
- (c) Third fiscal year of Project Installation.
- (d) The remaining job to be done.
- (e) The Total Project.

Column (1) "Items" List by purpose or phase and by agency responsibility.

- (a) List "Technical Assistance" (Section 7) for land treatment measures, by agency, as a separate item.

- (b) "TOTAL CONSTRUCTION COSTS". (Section 7) Enter the sum of Total Flood Prevention and Total Agricultural Water Management.
- (c) "INSTALLATION SERVICES" costs (Section 7) for all measures except land treatment will be entered as a lump sum by agency.
- (d) "OTHER COSTS" will be entered as a lump sum and will represent such non-Federal costs as land, easements, rights-of-way, water rights, etc.
- (e) "TOTAL STRUCTURAL MEASURES". Enter the sum of Total Flood Prevention, Total Agricultural Water Management, Total Installation Services and Other Costs. This sum should equal the total construction costs plus total installation services plus Other Costs.
- (f) "GRAND TOTAL". Enter the sum of the Total Land Treatment costs, and the Total Structural Measures. Federal costs here are limited to funds to be made available from appropriations for "Watershed Protection and Flood Prevention".
- (g) "SUMMARY". Enter the appropriate total estimated Federal costs and non-Federal costs by agencies. The Summary total should equal the Grand Total.

When any items such as Forest Service, Drainage, Irrigation, etc. are not a part of the project they should be omitted from the Table.

Column (2) "Unit". Enter the proper unit for reporting the measure; acres, feet, miles, cubic yards, etc.

Column (3) "No. to be applied - Fed. land". Enter the number of units to be applied on Federal land by items. When no items are proposed for Federal land, this column should be omitted.

Column (4) "No. to be applied - non-Fed. land". Enter the number of units to be applied on non-Federal lands by items.

Column (5) "No. to be applied - Total". Enter the sum of column 3 plus column 4. When no items are proposed for Federal land, this column should be omitted.

Column (6) "Estimated Cost - Federal - Federal land". Enter the estimated Federal cost, by items, for Federal land. (Watershed Protection and Flood Prevention funds only). When no items are proposed for Federal land, this column should be omitted.

Column (7) "Estimated Cost - Federal - non-Federal land". Enter the estimated Federal cost, by items, for non-Federal land (Watershed Protection and Flood Prevention funds only).

Column (8) "Estimated Costs - Federal - Total". Enter the sum of columns 6 plus 7. When no measures are proposed for Federal land, this column should be omitted.

Column (9) "Estimated Cost - non-Federal - Federal land". Enter the estimated non-Federal cost, by items, for Federal land. When no items are proposed for Federal land, this column should be omitted.

Column (10) "Estimated Cost - non-Federal - non-Federal lands". Enter the estimated non-Federal cost, by items for non-Federal land.

Column (11) "Estimated Cost - non-Federal - Total". Enter the sum of columns 9 plus 10. When no measures are proposed on Federal land, this column should be omitted.

Column (12) "Total". Enter the sum of Federal and non-Federal costs.

"Date". Enter the date shown on the cover of the Watershed Work Plan. When any necessary revisions are made and a new Table 1 is submitted, enter the date of such revision.

While sample Table 1 lists only the Soil Conservation Service and the Forest Service, other agencies may need to be included in the table. For example, on some Federal land the Bureau of Land Management (BLM) would be responsible for works of improvement and should be listed following the Forest Service entries for the applicable items.

Estimated project costs for the State office and the Engineering and Watershed Planning Unit should be distributed to the technical assistance and installation services items for the Soil Conservation Service.

In addition, increase the total SCS Federal cost estimates, including State Office and Engineering and Watershed Planning Unit costs, by four percent. This increase will also be distributed to the Technical Assistance and Installation Services items to cover indirect costs of the Washington Office.

Cost estimates by the Forest Service and other Federal agencies should be the total cost, including all estimated indirect costs that will eventually be charged to the project by the concerned agencies. Such indirect costs should be distributed to the Technical Assistance and Installation Services items by agencies.

TABLE I - ESTIMATED INSTALLATION COSTS

Charles Creek Watershed, Middlestate

For: _____

Items (1)	Unit (2)	No. to be Applied			Estimated Cost						TOTAL (12)	
		Federal Land (3)	Non-Fed Land (4)	Total (5)	Federal			Non-Federal				
					Federal Land (6)	Non-Fed Land (7)	Total (8)	Federal Land (9)	Non-Fed Land (10)	Total (11)		
<u>LAND TREATMENT</u>												
Soil Conservation Service:												
Land Treatment Measures												
Technical Assistance												
SCS Subtotal												
Forest Service:												
Land Treatment Measures												
Technical Assistance												
FS Subtotal												
<u>TOTAL LAND TREATMENT</u>												
<u>STRUCTURAL MEASURES</u>												
FLOOD PREVENTION												
Soil Conservation Service:												
Land Stabilization												
Waterflow Control												
SCS Subtotal												
Forest Service:												
Land Stabilization												
Waterflow Control												
FS Subtotal												
<u>TOTAL FLOOD PREVENTION</u>												
AGRICULTURAL WATER MANAGEMENT												
Drainage												
Soil Conservation Service:												
Total Drainage												
Irrigation												
Soil Conservation Service:												
Total Irrigation												
Other Agr. Water Management												
Soil Conservation Service:												
Total Other Agr. Water Management												
<u>TOTAL AGRICULTURAL WATER MANAGEMENT</u>												
<u>TOTAL CONSTRUCTION COSTS</u>												
INSTALLATION SERVICES												
Total SCS												
Total FS												
Total Other (by Agencies)												
<u>TOTAL INSTALLATION SERVICES</u>												
<u>OTHER COSTS</u>												
<u>TOTAL STRUCTURAL MEASURES</u>												
<u>GRAND TOTAL</u>												
<u>SUMMARY</u>												
Total SCS												
Total FS												
Total Other (by Agencies)												
<u>TOTAL</u>												

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Date: _____

INSTRUCTIONS FOR TABLE 2 - STATUS OF WATERSHED WORKS OF IMPROVEMENT

This table may be used where necessary as evidence in justifying cost-sharing arrangements.

Column (1) "Measures". List under the major headings indicated only those measures contributing to the objectives of the project which have been applied as of the time of preparation of the work plan.

Column (2) "Unit". Enter the same unit used in Table 1 for reporting these measures.

Column (3) "Applied to Date". Enter the number of units by measures which have been applied to date (close of previous fiscal year) in order to stay in balance with Table 1.

Column (4) "Total Non-Federal Cost". Enter the total non-Federal cost of each item exclusive of any Federal cost sharing. Such costs may be based on current prices.

"Date". Enter date shown on the cover of the Watershed Work Plan. When any necessary revisions are made and a new Table 2 is submitted, enter the date of such revision.

TABLE 2 - STATUS OF WATERSHED WORKS OF IMPROVEMENT
(at time of Work Plan Preparation)

Charles Creek Watershed, Middlestate

Measures (1)	Unit (2)	Applied to Date (3)	Total Non-Federal Cost (4)
<u>LAND TREATMENT</u>			
<u>STRUCTURAL MEASURES FOR FLOOD PREVENTION</u>			
<u>AGRICULTURAL WATER MANAGEMENT</u>			
<u>Drainage</u>			
<u>Irrigation</u>			
<u>Other Agricultural Water Management</u>			
Total	XXXX	XXXXXX	

Date _____

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INSTRUCTIONS FOR TABLE 3 - ANNUAL COSTS

Column (1) "Measures". List under the major headings indicated those measures included in Table 1 for Total Project (less Land Treatment Measures) single or in groups, as used for evaluation purposes. For example, we might have the following:

"Land Stabilization"

1. Grade stabilization structures No. 1, 5, 8, and 9
2. Grade stabilization structure No. 2
3. Grade stabilization structure No. 3, 4, 7, in combination with shaping and seeding of waterway "X"

"Waterflow Control"

1. Floodwater retarding structures No. 1, 3, and 5
2. Floodwater retarding structure No. 2
3. Floodwater retarding structure No. 4
4. Channel improvement
5. Detention type terraces, group A
6. Floodwater retarding structure No. 6, in combination with detention type terraces, group B

"Drainage"

In most projects, the drainage measures will be evaluated as a group, and only lump sum entries will be made.

"Irrigation"

Similar to drainage and only lump entries will be made.

"Other Agricultural Water Management"

1. Water spreading devices
2. Eradication and control of salt cedar

Vertical columns (2) through (9). Enter the appropriate costs for installation, operation, maintenance, other economic and total for each of the items entered in column (1) "Measures".

Column (2) "Federal". Using a fifty-year amortization period or the life of the measures, whichever is shorter, the Federal installation costs will be converted to annual costs based on the current Federal interest rate.

Column (3) "Non-Federal". Using a fifty-year amortization period or life of the measure, whichever is shorter, the Private installation costs will be converted to annual costs based on current borrowing rates.

NOTE: All installation costs are to be based on the "prices" for the last complete year for which information is available. If the installation period is greater than 5 years, "long term" prices should be used.

Column (4) "Total". Enter the total installation costs of columns (2), and (3) for each item listed in column (1).

Columns (5) "Federal" (6) "Non-Federal". Enter the operation and maintenance costs. In determining the "Operation and Maintenance costs", the long-term prices (A.R.S.) will be used.

Column (7) "Total". Enter the total operation and maintenance costs for each of the items listed in column (1).

Column (8) "Other Economic". Enter those economic costs which include other identifiable expenses, losses and liabilities susceptible to monetary evaluation. (See page 9, item 9 of A-47).

Column (9) "Grand Total". Enter the sum of column (4), column (7) and column (8).

"Subtotals". Enter the appropriate total costs for those measures as indicated in column (1).

"Total Structural Measures for Flood Prevention" and "Total Agricultural Water Management". Enter the total costs of all "Structural Measures for Flood Prevention" and "Agricultural Water Management" as indicated for the project.

"Date". Enter date on the cover of the Watershed Work Plan. When any necessary revisions are made and a new Table 3 is submitted, enter the date of such revision.

TABLE 3 - ANNUAL COSTS

Charles Creek Watershed, Middlestate

Measures (1)	AMORTIZATION OF INSTALLATION COSTS		OPERATION AND MAINTENANCE COSTS		Other Eco- nomic Costs (8)	Total (9)
	Federal (2)	Non-Federal (3)	Total (4)	Federal (5)	Non-Federal (6)	Total (7)
	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)
<u>STRUCTURAL MEASURES FOR FLOOD PREVENTION</u>						
Land Stabilization						
Subtotal						
Waterflow Control						
Subtotal						
TOTAL STRUCTURAL MEASURES FOR FLOOD PREVENTION						
<u>AGRICULTURAL WATER MANAGEMENT</u>						
Drainage						
Irrigation						
Other Agricultural Water Management						
TOTAL AGRICULTURAL WATER MANAGEMENT						
GRAND TOTAL						

4/19/55

Date

INSTRUCTIONS FOR TABLE 4 - SUMMARY OF BENEFITS

Column (1) "Item". In this column should appear those items for which damage reduction or increased production benefits have been evaluated and claimed as resulting from the installation of the works of improvement included in the work plan. These items should always be listed in the order shown to assist in summary uses.

Column (2) "Estimated Average Annual Damage Without Project". Enter the dollar value of the average annual damage occurring without the project.

Column (3) "Estimated Average Annual Damage Without Structural Measures". Enter the dollar value of the average annual damage remaining with the land treatment measures applied.

Column (4) "Estimated Average Annual Damage With Project". Enter the dollar value of the average annual damage with land treatment and structural measures installed.

Column (5) "Benefits from Structural Measures". Enter the average annual flood prevention benefits or increased production benefits as applicable. Benefits for Agricultural Water Management items will be calculated as the difference between present conditions and with the entire program installed. Delayed benefits should be discounted.

Columns (6), (7), (8) and (9) "Classes of Benefits". In these columns show a breakdown of benefits listed in Column (4), in accordance with definitions given in Section 7 "Cost-Sharing Criteria".

TABLE 4 - SUMMARY OF BENEFITS

Charles Creek Watershed, Middlestate

(1) Item	(2) Estimated Average Annual Damage Without Project (dollars)	(3) Est. Average Annual Damage Without Structural Measures (dollars)	(4) Est. Average Annual Damage With Project (dollars)	(5) Benefits from Structural Measures (dollars)	Classes of Benefits			
					1		2	
					A	B	A	B
				(5)	(6)	(7)	(8)	(9)
				(dollars)	(dollars)			
Floodwater								
Sediment								
Erosion								
Indirect								
SUBTOTAL								
Benefit from changed use of land	XXXXXX	XXXXXX	XXXXXX					
TOTAL FLOOD PREVENTION BENEFITS	XXXXXX	XXXXXX	XXXXXX					
Drainage	XXXXXX	XXXXXX	XXXXXX					
Irrigation	XXXXXX	XXXXXX	XXXXXX					
Other Agricultural Water Management	XXXXXX	XXXXXX	XXXXXX					
TOTAL AGRICULTURAL WATER MANAGEMENT BENEFITS	XXXXXX	XXXXXX	XXXXXX					
GRAND TOTAL ALL BENEFITS								

\$

DATE

Date

4/19/55

INSTRUCTIONS FOR TABLE 5 - BENEFIT-COST ANALYSIS

Column (1) "Measures". List under the major headings indicated, those measures included in Table 1 for Total Project (less Land Treatment Measures), single or in groups, as used for evaluation purposes. For example, see instructions for Table 3, Annual Costs.

Vertical columns (2) through (9). Enter the appropriate average annual benefits. Such entries for each measure will be shown as a dollar value.

Column (10) "Total". Enter the total average annual benefits for each evaluation unit. This will be the sum of all the columns immediately to the left. These figures should agree with those of Table 4.

Column (11) "Average Annual Cost". Enter the average annual costs for each evaluation unit. These figures should agree with those in column (11), Grand Total, of Table 3, Annual Costs.

Column (12) "Benefit-Cost Ratio". Enter the relationship of benefits to costs, with costs as unity or 1.0. Compute expression of benefits to nearest tenth or hundredth (1.9 to 1.0 or 1.32 to 1.0).

"Date". Enter date shown on the cover of the Watershed Work Plan. When any necessary revisions are made and a new Table 5 is submitted, enter the date of such revision.

TABLE 5 - BENEFIT COST ANALYSIS

Charles Creek Watershed, Middlestate

Measures (1)	Average Annual Benefits							Average Annual Cost. (11) (dollars)	Benefit Cost Ratio (12)
	Floodwater (2) (dollars)	Sediment (3) (dollars)	Erosion (4) (dollars)	Indirect (5) (dollars)	Changed Use of Land (6) (dollars)	Drainage (7) (dollars)	Irrigation (8) (dollars)	Other Agri. Water Mgt. (9) (dollars)	Total (10) (dollars)
STRUCTURAL MEASURES FOR FLOOD PREVENTION									
Land Stabilization									
Subtotal									
Waterflow Control									
Subtotal									
TOTAL STRUCTURAL MEASURES FOR FLOOD PREVENTION									
AGRICULTURAL WATER MANAGEMENT									
Drainage									
Irrigation									
Other Agricultural Water Management									
TOTAL AGRICULTURAL WATER MANAGEMENT									
GRAND TOTAL									

4/19/55

DATE

INSTRUCTIONS FOR TABLE 6 - STRUCTURE DATA

Tables 6, 6A, 6B, etc. should present structure data for the several types or kinds of structures included in the work plan. Separate structure data tables should be prepared for the following types of structures:

Floodwater Retarding (Sample Table 6)
Grade Stabilization (Sample Table 6A)
Channel Improvement (to be developed)
Other Significant Types

Also, Table 6, "Estimated Structure Cost Distribution", should be prepared (Sample Table 6B).

Tables used should be numbered consecutively (6, 6A, 6B, 6C, etc.,) as applicable to the project.

Preliminary Estimates For

Charles Creek Watershed, Middlestate

[illegible]

1/ Exclude the area from which runoff is controlled by other retarding structures

Date_

TABLE 6 B - STRUCTURE DATA
Estimated Structure Cost Distribution
 Charles Creek Watershed, Middlestate

Structure Site Number or Name (1)	Federal Installation Cost					Non-Federal Installation Cost				Estimated Total Cost (12) (dollars)	
	Contract (2) (dollars)	Instal- lation Services (3) (dollars)	Contin- gencies (4) (dollars)	Adm. and Misc. (5) (dollars)	Total Federal (6) (dollars)	Contract (7) (dollars)	Instal- lation Services (8) (dollars)	Ease- ments & R/W (9) (dollars)	Contin- gencies (10) (dollars)		Total Non- Federal (11) (dollars)
FLOODWATER RETARD- ING STRUCTURES											
TOTAL											
GRADE STABILIZATION											
TOTAL											
OTHER											
TOTAL											
GRAND TOTAL											

Date _____

4/19/55

TABLE 7 - SUMMARY OF PHYSICAL DATA

Charles Creek Watershed, Middlestate

Item	Unit	Quantity Without Program	Quantity With Program
Watershed area	Sq. Mi.		xxxxxxxxxxxx
Watershed area	Ac.		xxxxxxxxxxxx
Area of cropland	Ac.		
Area of grassland	Ac.		
Area of woodland	Ac.		
Overflow area subject to damage by design storm	Ac.		
Annual rate of erosion			
Sheet	Tons/yr.		
Gully	Tons/yr.		
Streambank	Tons/yr.		
Scour	Tons/yr.		
Area damaged annually by:			
Sediment	Ac.		
Floodplain scour	Ac.		
Swamping	Ac.		
Streambank erosion	Ac.		
Sheet erosion	Ac.		
Sediment Production	Tons/Ac./yr.		
Average Annual rainfall	Inches		xxxxxxxxxxxx

Date _____

4/19/55

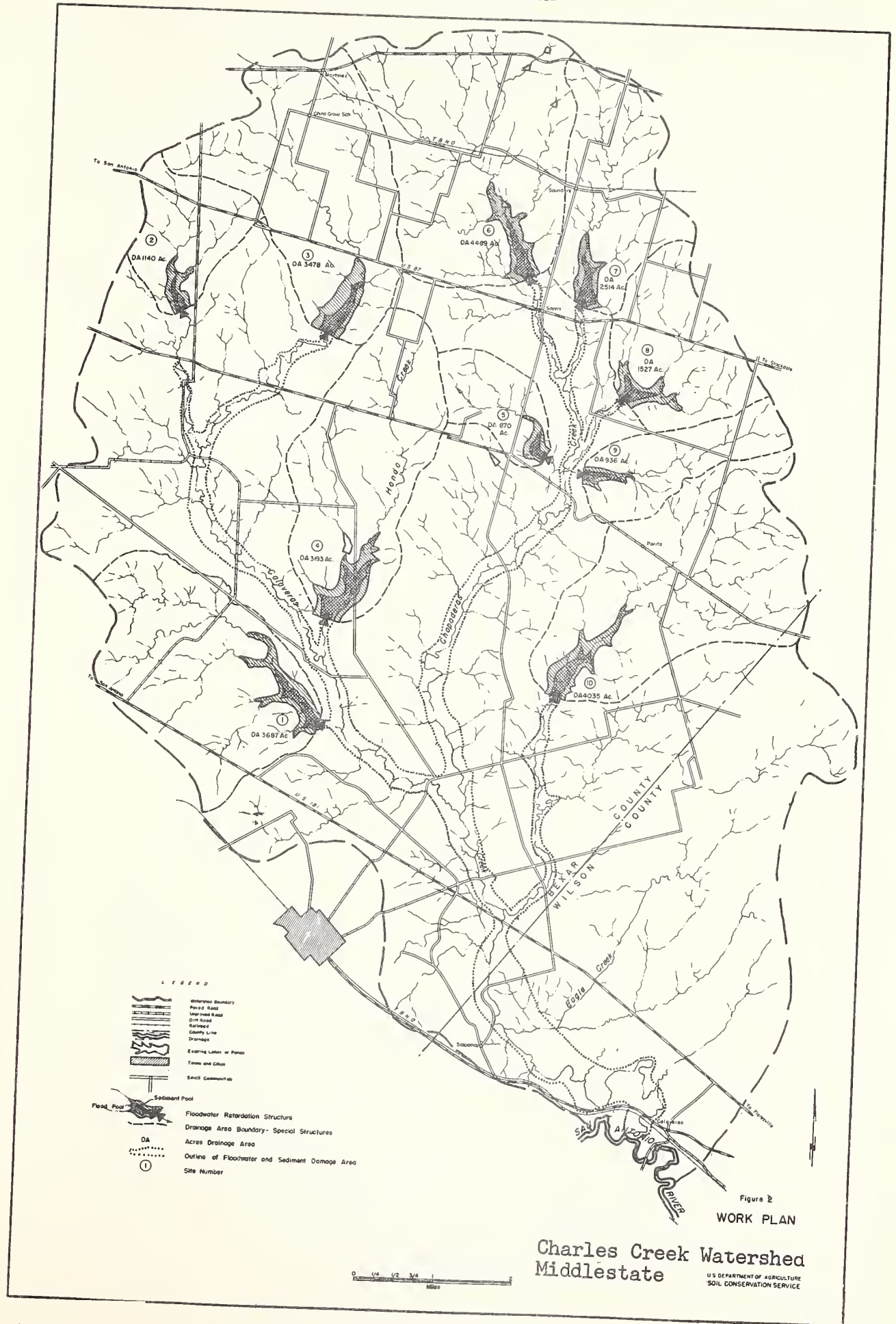
TABLE 8 - SUMMARY OF PLAN DATA

Charles Creek Watershed, Middlestate

Item	Unit	Quantity
Years to complete program	Year	
Total installation cost		
Federal	Dollar	
Non-Federal	Dollar	
Annual O & M cost		
Federal	Dollar	
Non-Federal	Dollar	
Annual benefits	Dollar	
Structural Measures		
Floodwater retarding structures	Each	
Area inundated by structures		
Floodplain		
Detention pool	Ac.	
Sediment pool	Ac.	
Upland		
Detention pool	Ac.	
Sediment pool	Ac.	
Watershed area above structures	Ac.	
Reduction of floodwater damage		
Land Treatment Measures	Percent	
Structural Measures	Percent	
Reduction of sediment damage		
Land Treatment Measures	Percent	
Structural Measures	Percent	
Reduction of erosion damage		
Land Treatment Measures	Percent	
Structural Measures	Percent	
Benefit from more intensive use of land resulting from reduction of flood hazard	Dollar	
Irrigation Benefits	Dollar	
Drainage benefits	Dollar	
Other Agricultural Water Management	Dollar	

Date _____

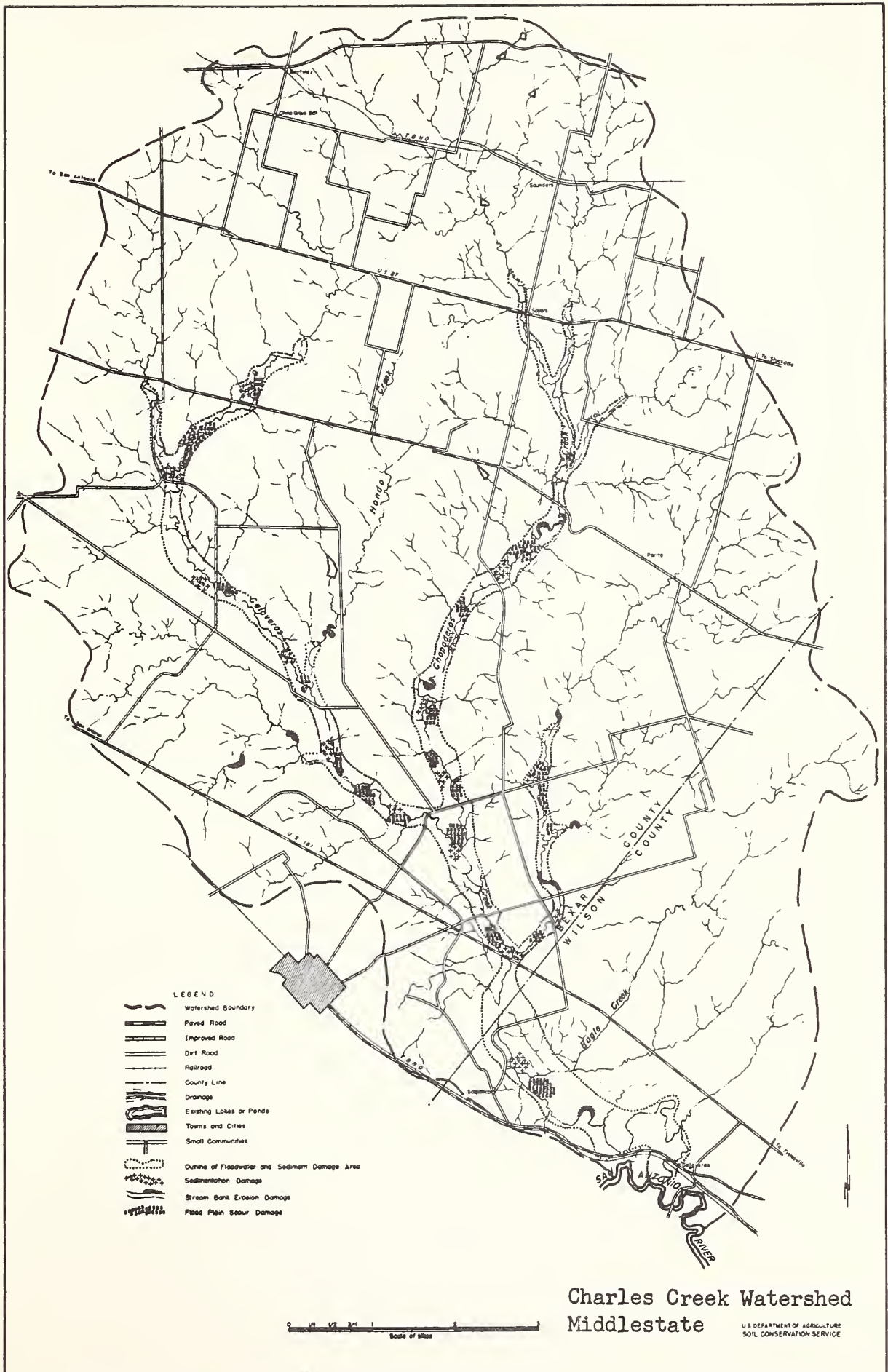
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4/19/55

Figure 1

PROBLEM LOCATION MAP



4/19/55

Figure 2

SECTION 26

LEGISLATIVE HISTORY

OF THE

WATERSHED PROTECTION AND FLOOD PREVENTION ACT
(Public Law 566, 83d Congress)

UNITED STATES DEPARTMENT OF AGRICULTURE
OFFICE OF THE SOLICITOR
FORESTRY AND LANDS DIVISION
OCTOBER 1954

Preface

This legislative history of the Watershed Protection and Flood Prevention Act has been compiled from the legislative documents and material herein-after listed. It consists of quotations from such documents and material.

Under the plan which has been followed the Act is divided, when and as required, into its sections, subsections, provisos and clauses. With the exceptions noted in the following paragraph, these are then considered under three headings, namely, House, Senate, and Conference Report. The House and Senate headings are in turn separated into the subheadings of Bills, Hearings, Committee Report, and Debate. The Conference Report heading is divided into the Report itself, Agreement thereto by the House, and Agreement thereto by the Senate. The House heading includes an additional subheading entitled "Extension of remarks by Mr. Hope in explanation of the Act." These remarks were made by Mr. Hope after both the House and the Senate had agreed to the conference report.

In many instances the record, with respect to material which would fall under a given heading or subheading, is silent or the available material is not of sufficient value to warrant quotation. Also, certain provisions of the bills are identical with the corresponding provisions of the Act. In these cases the headings, subheadings, or parts thereof have been omitted.

Footnotes have been used to denote certain provisions of the Act which were added or amended by the conference committee, and to point out provisions which appeared in certain bills but which were omitted from the Act.

The starting point selected for this legislative history is August 1, 1953, which is the date on which the bill H. R. 6788 was introduced by Mr. Hope. Hearings by a subcommittee of the House Committee on Agriculture relating to the prevention of agricultural flood damages were held in 1951, and several bills dealing primarily with flood prevention were introduced in the House in 1952. However, it is not believed that detailed consideration of these preliminary steps in the development of the legislation would be worthwhile.

The documents and material from which this legislative history has been compiled are as follows:

1. Public Law 566 -- 83d Congress, Chapter 656 --
2d session, H. R. 6788.

2. Hearings

- a. Hearings before the Committee on Agriculture, House of Representatives, 83d Congress, 1st session, on Conservation and Watershed Programs, April 28 to May 11, 1953.
- b. Hearings before the Committee on Agriculture and Forestry, United States Senate, 83d Congress, 2d session, on S. 2549, Cooperative Soil Conservation and Flood Prevention Projects, January 14, 15 and February 15, 1954.

3. Bills

- H. R. 6788 - Mr. Hope - August 1, 1953
- H. R. 6788 as amended by the House - March 11, 1954
- S. 2549 - Mr. Aiken - August 1, 1953
- S. 2549 - Committee Print - January 15, 1954
- H. R. 6788 - Committee Print - May 22, 1954
- H. R. 6788 as amended by the Senate Committee - June 18, 1954

4. Committee Reports

- a. House of Representatives Report No. 1140, 83d Congress, 2d session
 - b. Senate Report No. 1620, 83d Congress, 2d session
5. Conference Report - House of Representatives Report No. 2297, 83d Congress, 2d session
6. a. The material contained in the Congressional Record under the headings shown in the following chronology (Congressional Record Index for August 2 to August 15, 1954) of the legislative history of the Act:
- H. R. 6788 -- To authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes.
 - Reported back (H. Rept. 1140), 1123
 - Made special order (H. Res. 454), 2947
 - Debated, amended, and passed House, 2953
 - Referred to Senate Committee on Agriculture and Forestry, 2976
 - Reported with amendment (S. Rept. 1620), 8042

Objected to, 8141
Amended and passed Senate, 8166
Senate insists on its amendment and asks for a conference, 9398
Conferees appointed, 9398
House disagrees to Senate amendment and agrees to a conference, 9441
Conferees appointed, 9441
Conference Report (No. 2297) submitted in Senate and agreed to, 10426
Conference report submitted in House, 10499
House agrees to conference report, 10838
Examined and signed, 10852, 10941
Presented to the President, 11386
Approved Public Law 566, 13025

- b. Mr. Hope's Extension of Remarks in Explanation of the Act, Congressional Record, July 28, 1954, page A-5491

AN ACT

To authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States, causing loss of life and damage to property, constitute a menace to the national welfare; and that it is the sense of Congress that the Federal Government should cooperate with States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies for the purpose of preventing such damages and of furthering the conservation, development, utilization, and disposal of water and thereby of preserving and protecting the Nation's land and water resources.

SEC. 2. For the purposes of this Act, the following terms shall mean:
The "Secretary" -- the Secretary of Agriculture of the United States.

"Works of improvement" -- any undertaking for --

(1) flood prevention (including structural and land-treatment measures) or

(2) agricultural phases of the conservation, development, utilization, and disposal of water

in watershed or subwatershed areas not exceeding two hundred and fifty thousand acres and not including any single structure which provides more than five thousand acre-feet of total capacity. No appropriation shall be made for any plan for works of improvement which includes any structure which provides more than twenty-five hundred acre-feet of total capacity unless such plan has been approved by resolutions adopted by the Committee on Agriculture and Forestry of the Senate and the Committee on Agriculture of the House of Representatives, respectively. A number of such subwatersheds when they are component parts of a larger watershed may be planned together when the local sponsoring organizations so desire.

"Local organization" -- any State, political subdivision thereof, soil or water conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out, maintain and operate the works of improvement.

SEC. 3. In order to assist local organizations in preparing and carrying out plans for works of improvement, the Secretary is authorized, upon application of local organizations if such application has been submitted to, and not disapproved within 45 days by, the State agency having supervisory responsibility over programs provided for in this Act, or by the Governor if there is no State agency having such responsibility --

(1) to conduct such investigations and surveys as may be necessary to prepare plans for works of improvement;

(2) to make such studies as may be necessary for determining the physical and economic soundness of plans for works of improvement, including a determination as to whether benefits exceed costs;

(3) to cooperate and enter into agreements with and to furnish financial and other assistance to local organizations: Provided, That, for the land-treatment measures, the Federal assistance shall not exceed the rate of assistance for similar practices under existing national programs;

(4) to obtain the cooperation and assistance of other Federal agencies in carrying out the purposes of this section.

SEC. 4. The Secretary shall require as a condition to providing Federal assistance for the installation of works of improvement that local organizations shall --

(1) acquire without cost to the Federal Government such land, easements, or rights-of-way as will be needed in connection with works of improvement installed with Federal assistance;

(2) assume such proportionate share of the cost of installing any works of improvement involving Federal assistance as may be determined by the Secretary to be equitable in consideration of anticipated benefits from such improvements: Provided, That no part of the construction cost for providing any capacity in structures for purposes other than flood prevention and features related thereto shall be borne by the Federal Government under the provisions of this Act;

(3) make arrangements satisfactory to the Secretary for defraying costs of operating and maintaining such works of improvement, in accordance with regulations presented by the Secretary of Agriculture;

(4) acquire, or provide assurance that landowners have acquired, such water rights, pursuant to State law, as may be needed in the installation and operation of the work of improvement; and

(5) obtain agreements to carry out recommended soil conservation measures and proper farm plans from owners of not less than 50 per centum of the lands situated in the drainage area above each retention reservoir to be installed with Federal assistance.

SEC. 5. At such time as the Secretary and the interested local organization have agreed on a plan for works of improvement, and the Secretary has determined that the benefits exceed the costs, and the local organization has met the requirements for participation in carrying out the works of improvement as set forth in section 4, the Secretary is authorized to assist such local organizations in developing specifications, in preparing contracts for construction, and to participate in the installation of such works of improvement in accordance with the plan: Provided, That, except as to the installation of works of improvement on Federal lands, the Secretary shall not construct or enter into any contract for the construction of any structure unless there is no local organization authorized by State law to undertake such

construction or to enter into such contract, and in no event after July 1, 1956: Provided, That in participating in the installation of such works of improvement the Secretary, as far as practicable and consistent with his responsibilities for administering the overall national agricultural program, shall utilize the authority conferred upon him by the provisions of this Act: Provided further, That, at least forty-five days (counting only days occurring during any regular or special sessions of the Congress) before such installation involving Federal assistance is commenced, the Secretary shall transmit a copy of the plan and the justification therefor to the Congress through the President: Provided further, That any such plan (a) which includes reclamation or irrigation works or which affects public or other lands under the jurisdiction of the Secretary of the Interior, or (b) which includes Federal assistance for floodwater detention structures, shall be submitted to the Secretary of the Interior or the Secretary of the Army, respectively, for his views and recommendations at least sixty days prior to transmission of the plan to the Congress through the President. The views and recommendations of the Secretary of the Interior, and the Secretary of the Army, if received by the Secretary of Agriculture prior to the expiration of the above sixty-day period, shall accompany the plan transmitted by the Secretary of Agriculture to the Congress through the President: Provided further, That, prior to any Federal participation in the works of improvement under this Act, the President shall issue such rules and regulations as he deems necessary or desirable to carry out the purposes of this Act, and to assure the coordination of the work authorized under this Act and related work of other agencies including the Department of the Interior and the Department of the Army.

SEC. 6. The Secretary is authorized in cooperation with other Federal and with States and local agencies to make investigations and surveys of the watersheds of rivers and other waterways as a basis for the development of coordinated programs. In areas where the programs of the Secretary of Agriculture may affect public or other lands under the jurisdiction of the Secretary of the Interior, the Secretary of the Interior is authorized to cooperate with the Secretary of Agriculture in the planning and development of works or programs for such lands.

SEC. 7. The provisions of the Act of June 22, 1936 (49 Stat. 1570), as amended and supplemented, conferring authority upon the Department of Agriculture under the direction of the Secretary of Agriculture to make preliminary examinations and surveys and to prosecute works of improvement for runoff and waterflow retardation and soil erosion prevention on the watersheds of rivers and other waterways are hereby repealed: Provided, That (a) the authority of that Department of Agriculture, under the direction of the Secretary, to prosecute the works of improvement for runoff and waterflow retardation and soil erosion prevention authorized to be carried out by the Department by the Act of December 22, 1944 (58 Stat. 887), as amended, and (b) the authority of the Secretary of Agriculture to undertake emergency measures for runoff retardation and soil erosion prevention authorized to be carried out by section 7 of the Act of June 28, 1938 (52 Stat. 1215), as amended by section 216 of the Act of May 17, 1950 (64 Stat. 163), shall not be affected by the provisions of this section.

SEC. 8. There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act, such sums to remain available until expended.

SEC. 9. This Act may be cited as the "Watershed Protection and Flood Prevention Act".

Approved August 4, 1954.

Introduction

The Watershed Protection and Flood Prevention Act (Public Law 566, 83d Congress) originated in the Committee on Agriculture of the House of Representatives.

In August 1950 hearings were begun by this Committee on the subject of floodwater and sediment damages in upstream watershed areas. In October and November 1951 additional hearings on this subject were held in the Midwest by a subcommittee under the chairmanship of Mr. Poage. The object of these hearings was two-fold: To ascertain the nature of the problems involved and to determine what legislative action would be required to solve them. The following conclusions, according to Mr. Hope, were reached by the Committee:

"First, that our programs for soil and water conservation and for downstream river development and flood protection are closely interrelated and that there is a serious gap in our coordinated attack on this problem.

"Second, that gap lies in our approach to the matter of upstream watersheds. The soil conservation and water conservation activities of the Department of Agriculture and the Department of the Interior do not reach far enough downstream and the flood-control activities of the Corps of Engineers do not reach far enough upstream to meet and form a unified program. In between, in the small branches and creeks which form the upstream watersheds, there is a hiatus of authority and a lack of purposeful activity that is to a large extent nullifying both the work being done on major rivers downstream and on agricultural and forest lands above.

"Third, it is not necessary to wait until complete plans have been developed for full river valley development before this small watershed work is undertaken. In general, the work which needs to be done to prevent the rapid runoff of water through upstream creeks, branches, and gulleys, will be the same regardless of what the ultimate decision may be as to development of major streams farther down.

"Fourth, since from 25 to 75 percent of all flood damage occurs in these upstream areas, beyond the furthest benefits of the major downstream structures, the planning and installation of these upstream programs and projects should be a cooperative matter between the Federal Government, the States, local governmental agencies, municipalities, and private citizens and groups of citizens. Each should bear, insofar as possible, an equitable proportion of the cost based upon anticipated benefits."

On the basis of these conclusions, the subcommittee which had been responsible for making a study of this matter drafted a bill (H. R. 7868, 82d Congress), which was introduced by its chairman, Mr. Poage.

Hearings (unpublished) were held on this bill in June 1952. At these hearings, the bill was supported by the Department of Agriculture, major farm organizations, and many other groups and organizations interested in resource conservation and development.

Following the hearings, the Committee amended the bill in conformity with some of the suggestions made at the hearings. At the direction of the Committee, the author of the bill introduced a clean bill (H. R. 8243, 82d Congress) embodying the amendments, and this bill was reported favorably to the House (H. R. Rep. No. 2222, 82d Congress). However, the bill did not receive a rule enabling it to be brought to the floor of the House.

Early in the 83d Congress, the bill reported in 1952 was reintroduced by the chairman of the Committee, with some slight modification, as H. R. 4877. Subsequent to the introduction of the bill, the Committee held hearings (unpublished) on conservation and watershed programs in general and many of the witnesses specifically endorsed the bill.

The bill was subsequently considered by the Bureau of the Budget and was transmitted to the Committee, with relatively minor amendments, simultaneously and in connection with the message from the President on conservation which was delivered to the Congress on July 31, 1953. In this form the bill was reintroduced by Mr. Hope as H. R. 6788 on August 1, 1953. On the same date a companion bill, S. 2549, was introduced in the Senate by Mr. Aiken.

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Public Law 566 - 83d Congress
Chapter 656 - 2d Session
H. R. 6788

AN ACT

"To authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes."

Section 1

The Act:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States, causing loss of life and damage to property, constitute a menace to the national welfare; and that it is the sense of Congress that the Federal Government should cooperate with States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies for the purpose of preventing such damages and of furthering the conservation, development, utilization, and disposal of water and thereby of preserving and protecting the Nation's land and water resources."

House - Committee Report (H.R. Rep. No. 1140, 83d Cong., 2d sess.):

"The purpose of this bill [H. R. 6788] is to provide the legislative authority and direction for cooperative Federal-local action in attacking the problems of upstream soil and water conservation and flood prevention. The bill will provide the policies, the framework, and the standards under which action in this field can be taken jointly by the Federal Government, States, counties, and other local government entities, soil conservation or watershed districts, and local citizens' groups. Based on the sound principle of payment for value received, the bill provides that the cost of the programs and improvements shall be shared equitably between the participants in proportion to the benefit which each will receive. The program the bill authorizes will supplement both our present agricultural soil and water conservation programs

and our programs for development and flood protection of major river valleys. It will bridge the gap that now exists between these two types of programs and greatly enhance the ultimate benefits of both. It will provide an additional means of aiding in the conservation of scarce water supplies.

"Under the policies established by the bill, plans and projects will not be handed down from the top as part of some overall development plan, but can be initiated only by the people of the localities most intimately involved and can be carried into operation only with the fullest cooperation and initiative on the part of local groups and agencies."

"Section 1. Declaration of policy

"Declares that erosion, floodwater, and sediment damages in the watersheds of rivers and streams constitute a menace to the national welfare, and that the Federal Government should cooperate with States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies to prevent such damages and to preserve and protect the Nation's land and water resources."

Senate - Committee Report (Sen. Rep. No. 1620, 83d Cong., 2d sess.):

"The general purpose of the bill [H. R. 6788] is to carry out the upstream watershed recommendations contained in the President's message of July 31, 1953. . . . The bill provides for technical and financial assistance to State and local agencies in undertaking flood-prevention work and agricultural phases of water management in watersheds and sub-watersheds."

"The first section of the Committee amendment states it to be the sense of Congress that the Federal Government should cooperate with State and local agencies in flood-control and water-management projects."

Section 2

The Act:

"For the purposes of this Act, the following terms shall mean:

"The 'Secretary' -- The Secretary of Agriculture of the United States.

"'Works of improvement' -- any undertaking for --
 (1) flood prevention (including structural and
land-treatment measures) or
 (2) agricultural phases of the conservation,
development, utilization, and disposal of water . . ."

House - Bills (H. R. 6788):

"'Works of improvement' -- any undertaking for flood
prevention, including structural and land-treatment measures,
and agricultural phases of the conservation, development,
utilization and disposal of water . . . "

(H. R. 6788 as amended by the House, same as H. R. 6788)

House - Debate (Cong. Rec. March 15, 1954, p. A-1946):

"Mr. JONES of Alabama. I would like to direct an inquiry
regarding section 7 of the bill. I presume that provision
amends section 1 of the Flood Control Act of 1936 which was
later amended by the act of 1944 to include drainage. I would
like to have an expression from the chairman as to whether he
is of the opinion that flood prevention in this bill will give
authority to the Department of Agriculture to carry out the
drainage problem under the designation of flood prevention work.

"Mr. HOPE. I can say to the gentleman that I am sure it does
not give the Department any authority which it does not already
have to deal with drainage matters. I am not sure what power
it has under the general authority to deal with soil and water
conservation.

"Mr. JONES of Alabama. I was hoping that it would give that
authority, and I hope that the committee if the Department of
Agriculture does not seek the authority to carry out drainage
projects that it be included in the bill because that is an
integral and essential part of flood prevention work.

"Mr. HOPE. I would not want to say that where drainage was
an incidental part of the project that it might not be included.
I think it would have to be an incidental feature to a situation
which involved flood control unless the Department of Agriculture
already has some authority to deal with the subject.

"Mr. JONES of Alabama. The report of the Corps of Engineers
presently being transmitted to the Committee on Public Works
states under the act of 1944 that the flood-control work will
be carried out by the Corps of Engineers. The subsequent or
drainage work is being deferred to the Department of Agriculture.

It would seem to me that to carry out these work projects in an orderly fashion, the authority for a given watershed should be under the jurisdiction of the Department of Agriculture; otherwise we disturb the functions of the departments and we find difficulty. I would like to see that authority conferred on the Department of Agriculture.

"Mr. COOLEY. Mr. Chairman, will the gentleman yield?

"Mr. HOPE. I yield to the gentleman from North Carolina.

"Mr. COOLEY. I would like to ask the chairman of the Committee on Agriculture if I did not understand him to say that the bill did not contemplate dealing with purely drainage projects but that if in dealing with flood-prevention projects drainage became a vital part of that plan, this authority would be given under the bill to the Secretary to make an agreement which would involve some degree of drainage if that drainage was essential to the development of the flood-prevention project.

"Mr. HOPE. I think if drainage was perhaps an incidental matter that was tied in closely with flood prevention and the land treatment phase of the activity that the measure probably would include that authority. However, I do not want to give the impression that was contemplated by the committee as a part of the program because I do not think we considered that phase of the matter in connection with this legislation except as incidental. Certainly there is nothing in this bill which would take away any authority which the Department of Agriculture may now have to deal with drainage problems.

"Mr. COOLEY. I agree with the gentleman in what he has said, but I do not want the impression left in the RECORD here or with the Members of the House that if in the development of a proper flood-prevention project it is necessary to do certain things that the Secretary would be prohibited from doing them because merely there was some drainage involved.

"Mr. HOPE. I intended in my statement to the gentleman from Alabama to make that clear.

"Mr. JONES of Alabama. I believe that is the interpretation that should be placed on the bill and I was hopeful of getting an expression from the chairman where any future doubts would be resolved in favor of a drainage program in connection with a flood-control program, because it places too great a burden, otherwise, on the local people to get the Federal funds necessary to go ahead.

"Mr. HOPE. I thank the gentleman very much for his comments and suggestions."

House - Mr. Hope's extension of remarks in explanation of the Act (Cong. Rec. July 28, 1954, p. A-5491):

"The projects authorized by the act can be of two general types: First, a straight flood-prevention program, including structures of various kinds and land treatment measures, or second, a project embracing primarily the agricultural phases of conservation, development, utilization, and disposal of water. Or, of course, the project can embrace any combination of these two general objectives."

Senate - Bills (S. 2549, S. 2549 - Committee Print, and H. R. 6788 - Committee Print, same as H. R. 6788)

Senate - Committee Report:

"Section 2 of the amendment defines a 'work of improvement' as any undertaking for flood prevention and agricultural phases of the conservation, development, utilization, and disposal of water . . . in order to make it absolutely clear that a work of improvement may consist solely of an undertaking for 'agricultural phases of the conservation, development, utilization, and disposal of water,' such as a drainage project, the commas setting off the phrase 'including structural and land-treatment measures' have been changed to parentheses, and the typographical form has been changed slightly. While your committee believes that the definition as originally written covered drainage projects, whether incidental to flood-prevention work or not, there is some legislative history construing it otherwise, and your committee therefore recommends this change in punctuation and form."

Conference Report - The Report (H. R. Rep. No. 2297, 83d Cong., 2d sess.):

"The conference agreed to the change made by the Senate in the form and punctuation of the definition of 'works of improvement' to make it clear that the definition includes drainage projects and that it may be an undertaking either for flood prevention or the agricultural phases of the conservation, development, utilization and disposal of water."

"The conference agreed to the change made in form and punctuation by the Senate in the definition of 'works of improvement,' as well as to the use of 'and' [sic] instead of 'or' [sic] to make it clear that the definition includes drainage projects."

Section 2, Continued:

The Act:

" . . . in watershed or subwatershed areas not exceeding two hundred and fifty thousand acres and not including any single structure which provides more than five thousand acre-feet of total capacity. No appropriation shall be made for any plan for works of improvement which includes any structure which provides more than twenty-five hundred acre-feet of total capacity unless such plan has been approved by resolutions adopted by the Committee on Agriculture and Forestry of the Senate and the Committee on Agriculture of the House of Representatives, respectively."1/

House - Bills (H. R. 6788):

" . . . in watershed or subwatershed areas not exceeding two hundred and fifty thousand acres and not including any single structure which provides more than five thousand acre-feet of total capacity."

(H. R. 6788 as amended by the House, same as H. R. 6788.)

House - Mr. Hope's extension of remarks in explanation of the Act:

"In the event that the plan includes a proposed dam or other structure impounding more than 2,500 acre-feet, the procedure followed is the same as that for other projects except that

1/ The sentence beginning with "No appropriation . . . " was added by the conference committee.

an appropriation for such a project cannot be made until the Committee on Agriculture of the House and the Committee on Agriculture and Forestry of the Senate have adopted committee resolutions authorizing the project. The maximum total capacity of any structure which can be constructed under the authority of this act is 5,000 acre-feet.

"The method of making appropriations for this work will be determined from time to time by the Appropriations Committees and the Congress. It is anticipated that it will be worked out in such a way that there will be a minimum of delay involved and that funds for the start of work on a project will be available as soon as the project has been approved and the requirements for submission to the Congress have been complied with."

Senate - Bills (S. 2549, S. 2549 - Committee Print, and H. R. 6788 - Committee Print, same as H. R. 6788)

(H. R. 6788 as amended by the Senate Committee):

" . . . in watershed or subwatershed areas not exceeding two hundred and fifty thousand acres and not including any single structure which provides more than two thousand acre-feet of total capacity or such greater capacity, not exceeding five thousand acre-feet, as may be specifically authorized by Act of Congress."

Senate - Committee Report:

"Section 2 of the amendment defines a 'work of improvement' as any undertaking for flood prevention and agricultural phases of the conservation, development, utilization, and disposal of water in watershed or subwatershed areas not exceeding 250,000 acres and not including any single structure which provides more than 2,000 acre-feet of total capacity or such greater capacity, not exceeding 5,000 acre-feet, as may be authorized by Act of Congress.

"As passed by the House, a 5,000 acre-feet limitation was imposed upon the total capacity of any structure which might be included in a work of improvement. Your committee felt that this limitation might be somewhat high in view of the facts that the bill does not require individual authorization of projects by Congress, and that structures of this size might have considerable effect on flood control, navigation, and reclamation projects which must be individually considered and authorized by Congress. Your committee therefore recommends that congressional approval be required for projects including any structure having a total capacity between 2,000 and 5,000 acre-feet."

"Mr. HOLLIAND. First, as passed by the House, this measure imposed a limitation of 5,000 acre-feet upon the size of the structures to be constructed by the Department of Agriculture in protection and development of a watershed.

"The Senate committee felt that this limitation was entirely too high without later review of individual projects for authorization by the Senate Committee or the House committee or Congress. Therefore, the Senate committee recommended that this provision be changed so as to delegate to the Department of Agriculture full authority under the other provisions of the bill only as to projects with respect to which the structures to be erected would have a total capacity of not to exceed 2,000 acre-feet, and to projects between 2,000 acre-feet and 5,000 acre-feet which have first been reviewed by Congress and specifically authorized by act of Congress.

"The Senate committee reported that change, and it was incorporated in the Senate bill as passed earlier today.

"It was the view of the Senate Committee that structures of over 2,000 acre-feet might easily have a very grave impact upon navigation projects or flood-control projects or reclamation projects further down the stream in the same watersheds, which had been entrusted for development and for operation to the Corps of Army Engineers, in the case of flood control and navigation projects, and to the Reclamation Bureau of the Department of the Interior in the case of reclamation projects.

"The committee felt that it would be wholly unwise to expect of the Corps of Army Engineers, in the one case, and the Reclamation Bureau, in the other case, the unified control and operation to which the committee and the country should look from those agencies, and not only expect, but get. Therefore, the committee felt that Congress should reserve to itself the power, authority, and jurisdiction to review any proposed projects greater in size than 2,000 acre-feet, and up to 5,000 acre-feet in size, so that Congress could seek the advice and, in appropriate cases, secure the approval of, those agencies of government which I have already mentioned, and which have been given the control and responsibility for handling the important flood control and navigation and reclamation projects.

"The committee felt that, obviously, it was unwise to impinge upon the unity of control of important projects and that by dividing control we would, in all probability, create confusion and chaos."

Conference Report - The Report:

"The House bill provided that the Secretary of Agriculture must come into agreement with the Committee on Agriculture and Forestry of the Senate and the Committee on Agriculture of the House of Representatives on all watershed projects. The Senate amendment struck out this provision and provided that any dam providing a capacity of from 2,000 to 5,000 acre-feet must be approved by the Congress. The conference agreement substitutes for these provisions a requirement that before appropriations can be made for any projects containing any structure providing a capacity of from 2,500 to 5,000 acre-feet, the plan must be approved by resolutions adopted by the Senate and House Agriculture Committees.

"Under the new conference language, committee approval must be obtained before the necessary funds can be appropriated for a plan for works of improvement including a structure providing more than 2,500 acre-feet of total capacity. If an appropriation should be proposed without such committee approval such appropriation would be subject to a point of order. Although the conferees feel that such a proposal would not be made, it is their intent and understanding that a point of order can be made and sustained against appropriations for plans lacking committee approval."

Conference Report - Agreed to by the Senate (Cong. Rec. July 19, 1954, p. 10428):

"Mr. HOLLAND. Mr. President, I listened with interest and approval to the able statement made by the distinguished chairman of the Committee on Agriculture and Forestry, the Senator from Vermont Mr. AIKEN, in reporting the conference agreement on H. R. 6788, the watershed bill. It is probably unnecessary to make further comment, but there are four features of the conference report that I wish to mention briefly.

"The Senate will remember that the Senate bill differentiated between two sizes of projects which could be constructed under this program. The Senate passed its committee bill in a form providing that projects for 2,000 acre-feet or less might be initiated by the local districts and the Secretary of Agriculture without further reference to Congress, but that projects between 2,000 acre-feet and 5,000 acre-feet, because of their possible implications upon flood control, navigation, or reclamation projects which were downstream, must come before the Congress for authorization.

"In the conference, the figures were changed slightly. In the first instance, instead of having 2,000 acre-feet as the upper limit of the structures which could be constructed without further reference to Congress, that upper limit was restated to be 2,500 acre-feet. In other words, projects up to 2,500 acre-feet do not have to be approved further or considered further by the Congress.

"As to projects between 2,500 acre-feet and 5,000 acre-feet, the conference report differs from the provisions of both the Senate and House bills in that we have adopted the same machinery which the Congress adopted in the so-called lease-purchase bill. In an effort to relieve the full Congress of further details in this matter, it was decided, instead, to provide machinery under which the Senate and House committees alone would be given the power to authorize, which power would have to be affirmatively exercised before any appropriations could be made for projects coming within those sizes.

"Senators will remember that in the lease-purchase bill we were so advised by the parliamentarians of the House and the Senate that it is clear that under such a provision a point of order can be made if an appropriation is proposed for a project between the 2,500 acre-feet size and the 5,000 acre-feet size, without its having first been submitted to and authorized by the appropriate committees."

Section 2, Continued:

The Act:

"A number of such subwatersheds when they are component parts of a larger watershed may be planned together when the local sponsoring organizations so desire."

Senate - Hearings (pp. 35-37):

"Mr. McARDLE. We are greatly in favor of S. 2549. The only questions which we have regarding the proposed legislation has to do with the matter of whether or not there could be a combination of several of these 250,000-acre small watersheds, and the answer to that is, I think, fully covered in section 2 of the legislation, showing that there can be combinations of several such smaller areas.

" * * *

"One of the questions they have raised with us concerns the effect of the 250,000-acre limitation contained in section 2. In much of the West, due to conditions of rough terrain, low rainfall, large blocks of publicly owned lands, concentration of agriculture, industry and population in irrigated valleys, and because of the topographical relationship of mountains to valleys, watershed programs must be considered in terms of larger units than the 250,000-acre small subwatershed. Many western watersheds are like large funnels, with the arable land, the people, and the privately owned land concentrated at the small or outlet end of the funnel.

"The Boise River watershed is typical of a number of western watersheds. This river drains 2.6 million acres, of which only 366,000 acres or approximately 14 percent of the total watershed is in irrigated cultivated lands, primarily in the lower valley of the river. The rest of the watershed is in low, dry foothills or more humid mountains. Although there is a population of about 100,000 persons in the watershed, they are concentrated in the Boise Valley where 97 percent of them live, principally in urban areas. The upper watershed is largely unpopulated, and 63 percent is in the Boise National Forest. Watershed restoration is needed in both mountains and foothills. In the valley other works to facilitate land drainage, prevent erosion of irrigated lands, and protect against floodwaters are needed to complement the work done on the national forests in the mountains. In some cases it would be extremely difficult to get proper correlation of the work on the mountains and in the valley if the combined job were limited to an area of 250,000 acres or less.

"The Department interprets the bill in its present form to be sufficiently flexible to cover situations like the Boise. Section 2 specifically said: ' * * * a number of such watersheds when they are component parts of a larger watershed may be planned together when the local sponsoring organizations so desire.' The Department noted the above provision in its report, and would have recommended a comparable clause had it not already been included."

"Senator HOLLAND. I would like to know whether or not his comment on the joinder of several of these 250,000-acre watershed areas so as to make several of them be handled as one, whether he means he understands by this that there are several local districts, each of which would have an area in a watershed of 250,000 acres or less so that taken together they would have a combined watershed a great deal larger than that, and that authority would be given by this bill to construct a single structure or to join the construction of a single structure which would handle these structural improvements?

"Mr. McARDLE. Senator Holland, were you referring to a dam, for example?

"Senator HOLLAND. Yes.

"Mr. McARDLE. The bill as it now appears restricts the size of a dam so it would be a relatively small structure and must not contain more than 5,000 acre-feet. It is possible in these situations where two or more of these smaller watershed areas would be joined in such a way that one of these small dams would be the most effective way of handling some situations.

"I would assume that legislation would provide for that. I believe that those situations would be rather infrequent.

"Senator HOLLAND. Is it your understanding of the proposal on that point that the limitation to 5,000 acre-feet capacity would apply to the combination of the areas which were included in the single watershed?

"Mr. McARDLE. Senator, I am going to refer that to our associate solicitor, Mr. Mynatt, because I think it is a legal point.

"Mr. MYNATT. Senator, in my opinion, the limitation of the 5,000 acre-feet to any single structure would apply regardless of whether there was a combination.

"Senator HOLLAND. Even if there were 3 or 4 or 5 of the areas involved, neither of which would exceed 250,000 acres or about 500 square miles, the limitation of the structure required not to exceed 5,000 acre-feet total capacity would apply to the whole group of areas so joined together?

"Mr. MYNATT. Yes, sir."

Senate - Committee Report:

"A number of subwatersheds in any given watershed may be planned together when the local sponsoring organizations so desire."

Section 2, Continued:

The Act:

"'Local organization' -- any State, political subdivision thereof, soil or water conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out, maintain and operate the works of improvement."

House - Bills (H. R. 6788):

"'Local organization' -- any State, political subdivision thereof, soil or water conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out flood prevention and related activities."

(H. R. 6788 as amended by the House, same as H. R. 6788)

House - Mr. Hope's extension of remarks in explanation of the Act:

"Before any actual construction work can be done on the program there must be a local sponsoring organization authorized by State law to carry out, maintain, and operate the works of improvement which will be installed under the program."

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as H. R. 6788)

Senate - Committee Report:

"Section 2 defines a local organization as any State, political subdivision thereof, soil- or water-conservation district, flood-prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out, maintain, and operate the works of improvement. This definition differs slightly from that in the bill as it passed the House, since it includes agencies having authority to 'carry out, maintain, and operate the works of improvement,' instead of agencies having authority to 'carry out flood prevention and related activities.'"

Conference Report - The Report:

"The House defined 'local organization' as including any agency having authority under State law to 'carry out flood prevention and related activities.' The Senate approved a definition, which was agreed upon by the conference, changing the quoted phrase to 'carry out, maintain and operate the works of improvement.'"

Section 3

The Act:

"In order to assist local organizations in preparing and carrying out plans for works of improvement, the Secretary is authorized, upon application of local organizations if such application has been submitted to, and not disapproved within 45 days by, the State agency having supervisory responsibility over programs provided for in this Act, or by the Governor if there is no State agency having such responsibility -- "2/

House - Bills (H. R. 6788):

"In order to assist local organizations in preparing and carrying out plans for works of improvement, the Secretary is authorized, upon application of local organizations -- "

(H. R. 6788 as amended by the House, same as H. R. 6788)

House - Mr. Hope's extension of remarks in explanation of the Act:

"This application should be submitted to the State or local representative of the Soil Conservation Service and, at the same time, to the governor of the State. In order to prevent the conflict of these projects with other State development plans, the act gives the appropriate State agency or the governor a period of 45 days in which to disapprove such an application. If it is disapproved, no further action on that application will be taken by the Federal Government."

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as H. R. 6788)

(H. R. 6788 - Committee Print):

"In order to assist State and local organizations in preparing and carrying out plans for works of improvement, the Secretary is authorized, upon application of local organizations if such application has been reviewed and approved by

2/ Part of this provision was added by the conference committee.

the State agency having supervisory responsibility over programs provided for in this Act, or by the Governor if there is no State agency having such responsibility -- "

(H.R. 6788 as amended by the Senate Committee, same as H. R. 6788 - Committee Print)

Senate - Hearings (pp. 21-27):

"Senator MUNDT. What I am trying to bring out is this. While I was home in my State this summer we had a meeting in connection with this whole program, which finds much favor in the State. But the Secretary of Agriculture and some of the representatives at State college felt in a program of this kind in which local communities are expected to cooperate, the State government should not be entirely shunted aside; that they should have something to say as to the priority of the projects within the State or within the area.

"Have you anything in your bill which would provide for that kind of participation so that the State is not left out of this whole thing and you are just working direct with the local community and the Federal Government?

"Mr. YOUNG. Senator Mundt, I believe there is no specific provision for clearing with any particular State agency, although the entire approach of the bill is one of cooperation with the local communities and the States.

" * * *

"Senator THYE. There was no mention of our soil-conservation districts in your question, Senator Mundt. They likewise are a part of that State body and are located in given districts and areas of the State. Does this embody the cooperation of those districts? Does this law propose that, as you understand it?

"Mr. YOUNG. Yes, sir; I think it would, Senator Thye. We anticipate that the soil conservation districts individually or collectively, as the watershed situation may demand, would act as sponsors.

" * * *

"Senator HOLIAND. Mr. Chairman, I call attention to the fact that on lines 21 to 25 on page 2 in the definition of local organizations -- which is the term used in the act generally -- there is included not only the State but various other lesser subdivisions. I quote:

Local organization--any State, political subdivision thereof, soil or water conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out flood prevention and related activities.

So it is rather clear that under the terminology here this law would apply not only to the relationships between the Secretary of and the State, but also to the relationships between the Secretary and any other political subdivision having power to function in these fields. I think that is rather clear from that wording.

"Mr. YOUNG. We certainly would anticipate working with all of those organizations and recognizing that they would vary from State to State under the particular enabling legislation and organizations they have at the moment.

"Senator YOUNG. I think Senator Mundt is concerned with just how these projects in any particular State would be selected. What agency of the State, if any, would have a voice in selecting those projects?

"Senator MUNDT. That is exactly right. Obviously they had none. That is what stirred them up. So I pointed out in the meeting, 'Suppose you had been selecting them; which one would you take?' They said, 'The same one; that is the only one that was available. There is no quarrel about that.' But they said, 'Looking for long-term projects in which we are expected to cooperate, we want to cooperate. We have a lot of fine technicians in our agricultural State college.'

"They want to be a part of this program. They want to have something to say about the selecting of the projects. That is why I ask you the direct question: Is there anything here which gives the State some kind of authority in selecting the priorities. The Solicitor says 'No.' Is that right?

"Mr. MYNATT. That is right.

"Senator MUNDT. So the answer stands as 'No,' Senator, according to the Solicitor. The language is very pretty, but I am talking about the purport.

"Senator HOLIAND. Mr. Chairman, I fully agree with the point made by the Senator from South Dakota. I think what he is heading at is that there is no provision in this law such as that contained in the flood-control law which requires the approval of the governor of the State as a condition precedent, even to the submission of a program worked up by the Corps of Engineers to the Congress for its approval. I think that the Senator is making a point with which I completely concur, that the relationships between the Federal agency and the local organizations, each of which has a place and an important place in this picture, should always clear through the central agency in the State; that is, the State governor. And if you do not have that, you have to have a dozen kinds of different pictures within a large and intricate State, and some of them operating through enthusiasm probably and not through any deliberate motive, without going through the State authority.

"If that is what your remarks are addressed to, I completely concur with them."

Senate - Hearings, continued (p. 41):

Statement of Matt Triggs, Legislative Director, American Farm Bureau Federation:

"In section 6, on line 23, of page 5, it is recommended the following sentence be added, and this gets at the problem Senator Mundt raised and other Senators discussed:

In States in which the State legislature has designated a State agency to assume responsibility for planning or promoting programs of the type provided for in this Act the Secretary is authorized to enter into cooperative agreements with such agency to further the accomplishment of the objectives of this Act.

"This additional sentence would establish congressional intent to avoid bypassing State governments in those instances where State governments are or may be able and willing to undertake a responsibility in this field. Our recommendation in this respect is based upon a firm belief in the importance of maintaining strong, independent, and responsible State governments. One of the ways of doing this is to avoid preemption of authority by the Federal Government; to leave provisions in national legislation which will permit State governments to enter into partnership with the Federal Government in carrying on governmental functions. The preamble to the bill states that its purpose is to provide for cooperation of the Federal Government with the States in carrying out a water-resource program, but the basis for such cooperation is not provided in the bill itself."

Senate - Committee Report:

"Section 3 authorizes the Secretary of Agriculture, upon application of local organizations made with the approval of the appropriate State agency, to assist them in preparing and carrying out plans for works of improvement by conducting investigations and studies, furnishing financial and other assistance, and obtaining the cooperation and assistance of other Federal agencies. Approval by appropriate State agency was not required by the bill as it passed the House, but is considered desirable by your committee to afford the State some control over operations within its boundaries."

Senate - Debate (Cong.Rec. June 22, 1954, p. 8170):

"Mr. HOLLAND. The second of the changes which we insisted upon inserting in the bill would require Federal agencies to deal not solely with the local soil-conservation districts, but likewise to deal with the State governments, and with the State agency which has been created in most States to take over the supervision of such projects within the State.

"The bill, as it came from the House, gave no recognition at all to the fact that the States, as States, have important property rights and have important duties and responsibilities in connection with such projects. So, the second amendment which the Senate committee is insisting upon, and which the Senator from Florida thinks is basic to any sound planning or construction or operation of projects of this character, is to require the submission of such projects to the appropriate State agency, if one exists, for its approval, or, if no State agency exists, then to the Governor of the State in which the project lies for his approval before the project moves ahead."

Conference Report - The Report:

"The Senate amendment added a provision to the House bill requiring approval of the application of the local organization by the appropriate State agency, or if there were no such State agency, by the Governor. The conference agreed to a substitute provision requiring applications to be submitted to the State authority but authorizing the Secretary of Agriculture to proceed on such application unless it had been disapproved by the State agency, or the Governor in the absence of any authorized agency, within 45 days after submission of the application."

Conference Report - Agreed to by the Senate (Cong. Rec. July 14, 1954, p. 10428):

"Mr. MUNDT. Mr. President, will the Senator from Florida yield?

"Mr. HOLLAND. I yield.

"Mr. MUNDT. On another phase of the report I should like to interrogate the able Senator from Florida. He will recall that at the instance of the senior Senator from South Dakota there was written into the bill in various forms and at various stages an amendment which had the objective of making certain for the record that the conservation board of each State would have

something to say about the construction of watershed projects, either in a negative way or in an affirmative way, to make sure that the Federal Government did not come into the matter without the interests of the States being protected. Will the Senator dilate, for the benefit of our colleagues, on what has been done to give assurance that the State interests will be protected?

"Mr. HOLLAND. I appreciate the question, and I am glad to assure the Senator that the conference report does completely safeguard the point the Senator has made. He will remember that as passed by the Senate there was a requirement in the bill that either the appropriate State agency, if one existed, or the governor, would have to take affirmative action on a project as requested by, let us say, a local soil conservation district, before Federal aid could be given. The conference committee changed this provision so that it now provides for submission to the appropriate State agency, if one exists, and if one does not exist, for submission to the governor. Forty-five days time is given to the appropriate State agency or to the governor to act. If they act negatively, the project must not be further proceeded with, but if they act affirmatively, or do not act at all, the project can proceed and Federal aid can be given. So that, as written into the conference report, the provision is that in the absence of timely negative action by the appropriate State agency, if one exists having jurisdiction over such conservation matters, or by the governor, if no such agency exists, the program may move ahead.

"Mr. MUNDT. And the appropriate agency will receive official notice. It will have 45 days within which to go forward.

"Mr. HOLLAND. If they desire to have 45 days they may have that long a time. It is compulsory that the program be submitted to the appropriate State agency, if one exists, and if none exists, to the governor, before the program can move ahead.

"Mr. MUNDT. I believe that will meet the situation, because by the very nature of things, since this provision is in the law, every State will be watching these applications and following carefully the development of the plans and programs and areas. So it appears that 45 days should be ample time for a State to disapprove such a project if for reasons best known to itself it should so decide.

"Mr. HOLLAND. I completely agree with the Senator's conclusion in that regard.

"Mr. MONRONEY. I am particularly gratified that the State regulatory bodies will have a 45-day notice which will enable them to take action rather than to face the possibility that such projects will be killed by inaction, which might have been possible had this wise provision not been placed in the bill."

Section 3, Continued (Subsection 1)

The Act:

"(1) to conduct such investigations and surveys as may be necessary to prepare plans for works of improvement;"

House - Mr. Hope's extension of remarks in explanation of the Act:

"If the application is not disapproved by the State, the Soil Conservation Service will assign technicians and other personnel to work with the local organization in conducting investigations and surveys."

Senate - Committee Report:

"Section 3 authorizes the Secretary of Agriculture, upon application of local organizations . . . to assist them in preparing and carrying out plans for works of improvement by conducting investigations and studies,"

Section 3, Continued (Subsection 2)

The Act:

"(2) to make such studies as may be necessary for determining the physical and economic soundness of plans for works of improvement, including a determination as to whether benefits exceed costs;"

House - Debate (Cong. Rec. March 11, 1954, p. 2956):

"Mr. POAGE. Getting back to the details of the bill we have long been faced with the question of how we were going to do this kind of watershed work. Everybody is agreed it should be done. So we have brought in this bill which authorizes these steps: It allows any community in the United States, through a new or existing organization, whether a city, county, watershed district, soil conservation district, or any local government agency so authorized by State law to ask the Secretary of Agriculture to inspect their problem and see if a plan can be worked out that will be mutually agreeable to the locality and the

Secretary. The Secretary is empowered to make those investigations. If they are favorable, he then goes a little further and must determine the ratio of the benefits to the estimated cost, and only in the event that the ratio of benefits to estimated cost appears to be favorable, can he go further and recommend that the Federal Government cooperate with the locality by paying part of the cost. This is to prevent a community that might feel there was great need for some structure, but where there was not as much benefit to be derived as there was cost involved, from spending money that would not be an economical expenditure. Then after the Secretary has found that it is a good economic investment, the bill authorizes him to so report to the President and then to the Congress. The bill requires local contributions, but it makes possible construction which many localities could never make without Federal help."

Section 3, Continued (Subsection 3)

The Act:

"(3) to cooperate and enter into agreements with and to furnish financial and other assistance to local organizations:"

Section 3, Continued (Subsection 3, proviso)

The Act:

"Provided: That, for the land-treatment measures, the Federal assistance shall not exceed the rate of assistance for similar practices under existing national programs;"

Senate - Bills (S. 2549 - Committee Print):

"Provided further, That nonfederal contributions shall be at least 50 per centum of the total cost (not including operation and maintenance) of the project as estimated by the Secretary at the time the application is approved and pursuant to such regulations as the Secretary may prescribe, with appropriate adjustment in those instances where federally owned lands are included in the project;"^{3/}

^{3/} This proviso was omitted from the Act.

Senate - Hearings (pp. 27, 28):

"Senator HOLLAND. On page 3, lines 13 to 16, is the proviso that for the land-treatment measures, the Federal assistance shall not exceed the rate of assistance for similar practices under existing national programs. Just what is meant by that provision?

"Mr. MYNATT. Senator, it means that, for example, in the agricultural conservation program, if we are making only a 50 percent contribution for certain practices under that program, we could not make any greater contribution under the authority of this act. The rate of assistance could not be greater under this act than it is under our basic authorities.

"Senator HOLLAND. Is that provision limited to such projects as you mentioned, or is it limited to the formula for participation of the Federal Government in reclamation and flood control projects in general?

"Mr. MYNATT. It applies only to the laws of our Department.

"Senator HOLLAND. Just what does this mean? State it to the committee and into the record as to what that provision means in terms of percentage of participation by the Federal Government under this act.

"Mr. MYNATT. Where we have a program, for example, the agricultural conservation payments program or the technical assistance that the Soil Conservation Service may be given in land-treatment measures under the basic authorities of the Department, we cannot give a greater rate of assistance under the authority of this bill than we are giving under our other authorities for similar practices.

"Senator HOLLAND. Would that mean that as the details of the agricultural soil conservation program change that your authority under this act would change?

"Mr. MYNATT. Yes, sir.

"Senator HOLLAND. What is the present basis of participation by the Federal Government in this type of program?

"Mr. MYNATT. I would have to pass that, Senator. I do not know the present rate.

^{4/} Same as proviso in S. 2549 except that the words "for engineering structures" were inserted after the word "contributions."

"Mr. YOUNG. I believe there is no one here from the agricultural conservation program service, but the national docket sets that out in terms of maximum participations.

"Senator HOLLAND. That is something that is subject to change as the yearly appropriations change with reference to that program?

"Mr. YOUNG. Yes, that is right.

"Senator HOLLAND. Then that would mean this is not a fixed level organization, but a changeable and variable organization?

"Mr. YOUNG. To the extent that the agricultural conservation program would be a participant with farmers, it means that that docket for that year would apply. This bill would not change the rate of participation."

Section 3, Continued (Subsection 4)

The Act:

"(4) to obtain the cooperation and assistance of other Federal agencies in carrying out the purposes of this section."

Section 4

The Act:

"The Secretary shall require as a condition to providing Federal assistance for the installation of works of improvement that local organizations shall -- "

House - Bills (H. R. 6788):

"The Secretary shall require as a condition to providing Federal assistance that local organizations shall -- "

(H. R. 6788 as amended by the House, same as H. R. 6788)

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as H. R. 6788)

Senate - Committee Report:

"This section differs from the bill as passed by the House in that (1) it makes it clear that its requirements are not a prerequisite to assistance in the planning of works of improvement."

Conference Report - The Report:

"Two technical amendments of the Senate were adopted making it clear that local organizations (1) would not be required to meet all of the requirements of section 4 before assistance in planning could be given."

Section 4, Continued (Subsection 1)

The Act:

"(1) acquire without cost to the Federal Government such land, easements, or rights-of-way as will be needed in connection with works of improvement installed with Federal assistance;"

House - Bills (H. R. 6788):

"(1) furnish without cost to the Federal Government all easements and rights-of-way needed in connection with works of improvement installed with Federal assistance;"

(H.R. 6788 as amended by the House, same as H. R. 6788)

House - Committee Report:

" . . . local organizations shall furnish all necessary easements and rights-of-way;"

House - Mr. Hope's extension of remarks in explanation of the Act:

"These requirements are set out in Section 4 of the Act. They include the following: First, acquisition by the local organization of all land, easements, or rights-of-way necessary for the project, . . ."

Senate - Bills (S. 2549, same as H. R. 6788)

(S. 2549 - Committee Print):

"(1) acquire such land, easements, or rights-of-way as will be needed in connection with works of improvement installed with Federal assistance;"

(H. R. 6788 - Committee Print, same as S. 2549 - Committee Print)

Senate - Hearings (p. 39):

Statement of Matt Triggs, Legislative Director, American Farm Bureau Federation:

"It is recommended that section 4 (1) on line 22, page 3, be amended as follows:

"(1) acquire such land, easements, or rights-of-way as will be needed in connection with works of improvement installed with Federal assistance;

"The present language could be interpreted to mean that the local organizations shall acquire and transfer easements and rights-of-way to the Federal Government. The revised wording is designed to clarify the fact that any property rights will be and will remain the property of the local organization or of landowners in the district."

Senate - Committee Report:

"Section 4 requires local organizations desiring assistance to (1) acquire needed land, easements, and rights-of-way; . . .

"This section differs from the bill as passed by the House in that . . . (2) local organizations will not be required to transfer lands, easements, and rights-of-way to the United States."

Senate - Debate (Cong. Rec. June 22, 1954, p. 8170):

"Mr. HOLLAND. The third change which the Senate committee felt should be made -- and by no means is it the third in number, because there are many amendments which even a casual reading of the report will show to the reader -- is the change in the provision of the House bill in this respect: The House bill would

have required that the local organizations involved in these developmental projects should transfer to the United States the lands, easements, and rights-of-way on which the structures would be erected, the control of which would be placed in the Federal Government in connection with their operation. Under the theory adopted by the Senate committee, by means of which construction will always be in the hands of the local units of government, that particular provision became unnecessary and improper. So the amendment requires that such property interests, lands, easements, and rights-of-way, instead of being transferred to the United States, shall be acquired and held by the local unit of government which will be responsible for the letting of the contracts, and for the operation of the venture.

"By way of an overall comment, I am sure I can say that it was the philosophy of all members of the Senate committee that these projects are local projects, that the initiative must be local, and that the control of construction and the control of operations must be local if the sound and salutary objectives which are embodied in the President's message of July 31, 1953, relative to a program designed to conserve and improve the Nation's natural resources, are to be preserved at all stages."

Conference Report - The Report:

"The House provided that, among other conditions, local organizations would have to 'furnish' without cost to the Federal Government such land, easements, or rights-of-way as would be needed in connection with installation of works of improvement before the Secretary could assist with such works of improvement. The Senate amended this provision by changing 'furnish' to 'acquire', and the conference agreed to the Senate amendment."

Conference Report - Agreed to by the Senate (Cong. Rec. July 19, 1954, p. 10428):

"The House provided that, among other conditions, local organizations would have to 'furnish' without cost to the Federal Government such land, easements, or rights-of-way as would be needed in connection with installation of works of improvement before the Secretary could assist with such works of improvement. The Senate amended this provision by changing 'furnish' to 'acquire', and the conference agreed to the Senate amendment."

Section 4, Continued (Subsection 2)

The Act:

"(2) assume such proportionate share of the cost of installing any works of improvement involving Federal assistance as may be determined by the Secretary to be equitable in consideration of anticipated benefits from such improvements:"

House - Committee Report:

" . . . assume such proportionate share of the cost of installing works of improvement as the Secretary determines to be equitable in consideration of anticipated benefits;"

House - Debate (Cong. Rec. March 15, 1954, p. A-1945):

"Mr. GAVIN. With reference to the sharing of the costs, as I understand it, that will be on a fair and equitable basis between municipalities and the States and the Federal Government; is that correct?

"Mr. HOPE. The bill itself does not set up any formula for the matching of funds. It will depend upon, as the gentleman says, an equitable procedure and the part that will be borne by the Federal Government and the States and the local communities will be based upon the conditions that exist as far as any particular project is concerned. But the committee has had in mind that, overall, it will be about a 50-50 proposition, the Federal Government standing 50 percent of the cost and the States and local communities 50 percent."

Senate - Hearings (pp. 38, 39):

Statement of Matt Triggs, Legislative Director, American Farm Bureau Federation:

"The following amendments are respectfully recommended to more effectively accomplish these purposes:

"1. In section 3 (3), line 16, page 3 of the bill it is recommended that the following additional proviso be added:

"Provided further, That non-Federal contributions shall be at least 50 percent of the total cost (not including operation and maintenance) of the project as estimated by the Secretary

[at] the time the application is approved and pursuant to such regulations as the Secretary may prescribe, with appropriate adjustment in those instances where federally owned lands are included in the project.

"The purpose of this recommendation is to assure local responsibility and to prevent wasteful use of Federal funds. The best means of assuring that the projects carried out under the provisions of the bill will be sound is to provide for local sharing of the costs. This is in accordance with the intention of the bill; but it is believed the concept will be more firmly established if the Congress prescribes a more specific formula for cost-sharing. It is not believed this 50-percent requirement will represent any material handicap to successful and expeditious accomplishment of the purposes of the act. It is significant that the 65 projects approved for fiscal 1954 as a pilot program all involve an acceptance by local interests of a responsibility for carrying more than half of the cost of the project."

Senate - Committee Report:

"Your committee gave consideration to providing a more definite statutory formula for cost sharing, but determined that a definite formula could not be devised which would be equitable in all cases and that discretion would have to be left in the Secretary. The memorandum of Gladwin E. Young attached hereto as Exhibit D states that the non-Federal contribution to the 65 watersheds discussed in the second paragraph thereof is expected to represent more than 50 percent of the total cost of the projects. Your committee approves this policy and believes that it should be applied to projects authorized by this bill as far as may be equitable and possible."

Section 4, Continued (Subsection 2, proviso)

The Act:

"Provided, That no part of the construction cost for providing any capacity in structures for purposes other than flood prevention and features related thereto shall be borne by the Federal Government under the provisions of this Act;"

Section 4, Continued (Subsection 3)

The Act:

"(3) make arrangements satisfactory to the Secretary for defraying costs of operating and maintaining such works of improvement, in accordance with regulations presented by the Secretary of Agriculture;"

House - Bills (H. R. 6788):

"(3) make arrangements satisfactory to the Secretary for defraying all costs of operating and maintaining such works of improvement."

(H. R. 6788 as amended by the House):

"(3) make arrangements satisfactory to the Secretary for defraying all costs of operating and maintaining such works of improvement, in accordance with regulations presented by the Secretary of Agriculture;"

House - Committee Report:

"The Secretary shall require, as a condition to providing Federal assistance, that local organizations shall . . . make satisfactory arrangements for defraying all costs of operation and maintenance."

House - Debate (Cong. Rec. March 11, 1954, p. 2966):

"Mr. JONES of Alabama. Mr. Chairman, I offer an amendment which I send to the desk. On page 4, line 9, after the word 'improvement,' insert a comma and add the following: 'in accordance with regulations presented by the Secretary of Agriculture.'"

"Mr. Chairman, the additional language to that section would insure that the works of maintenance and improvements on these projects will be prosecuted in accordance with the authorization of the Congress. That is all the amendment does. It gives that assurance that the Secretary shall have that supervisory control of the project."

"Mr. HOPE. Mr. Chairman, will the gentleman yield?"

"Mr. JONES of Alabama. I yield to the gentleman from Kansas."

"Mr. HOPE. The distinguished gentleman from Alabama, whom I regard as very high authority on legislation relating to flood control and water conservation, and whose committee conducted a very noteworthy hearing a few years ago on this subject, spoke to me about this amendment. It seems to me it strengthens the bill, and I hope it will be adopted.

"The CHAIRMAN. The question is on the amendment offered by the gentleman from Alabama Mr. Jones.

"The amendment was agreed to."

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as H. R. 6788)

Senate - Committee Report:

"(3) local organizations would not necessarily be required to defray all operating and maintenance costs, so that appropriate allowance may be made for such factors as benefits to Federal lands,"

Conference Report - The Report:

"Two technical amendments of the Senate were adopted making it clear that local organizations . . . (2) would not necessarily be required to defray 'all' operating and maintenance costs."

Section 4, Continued (Subsection 4)

The Act:

"(4) acquire, or provide assurance that landowners have acquired, such water rights, pursuant to State law, as may be needed in the installation and operation of the work of improvement;"

Senate - Hearings (p. 39):

Statement of Matt Triggs, Legislative Director, American Farm Bureau Federation:

"It is recommended that an additional item 4 be added to section 4 of the bill to read as follows (this is what is required of the local association):

"(4) acquire, or provide assurance that landowners have acquired, such water rights, pursuant to State law, as may be needed in the installation and operation of the work of improvement.

"The purpose of this recommendation is to insure that before any project is constructed that the local organization will have complied with State water-right law. For example, in some States approval must be obtained from a specified State agency for the impounding of water above specified minimum amounts."

Senate - Hearings, Continued (p. 83):

Letter dated January 18, 1954, from Senator Robert S. Kerr of Oklahoma to Hon. George D. Aiken, Chairman, Committee on Agriculture and Forestry, United States Senate:

" . . . I favor the bill substantially as written. There are two suggestions which I would like to make:

"(1) Add to Section 4 the following subsection: '(4) Conform to State laws relating to water rights.'"

Senate - Committee Report:

" . . . and water right provisions have been added."

Conference Report - Agreed to by the Senate (Cong. Rec. July 19, 1954, p. 10428):

"The conference agreed to provisions of the Senate amendment requiring that State water-rights laws be complied with."

Section 4, Continued (Subsection 5)

The Act:

"(5) obtain agreements to carry out recommended soil conservation measures and proper farm plans from owners of not

less than 50 per centum of the lands situated in the drainage area above each retention reservoir to be installed with Federal assistance."

Senate - Hearings (p. 83):

Letter dated January 18, 1954, from Senator Robert S. Kerr of Oklahoma to Hon. George D. Aiken, Chairman, Committee on Agriculture and Forestry, United States Senate:

" . . . I favor the bill substantially as written. There are two suggestions which I would like to make:

" * * *

"(2) I would also recommend a provision as follows: 'That before retention reservoirs are constructed, a minimum of 50 percent of the drainage area above these reservoirs be required to be under agreement to carry out recommended soil-conservation measures and proper farm plans.'

"This requirement is made by the Soil Conservation Service on the Washita project in Oklahoma. The provision will assure a better land use and protection of the detention structure from siltation."

Senate - Committee Report:

"Section 4 requires local organizations desiring assistance to . . . (5) obtain agreements from owners of 50 percent of the lands above each retention reservoir to carry out recommended soil conservation measures."

Conference Report - The Report:

"The conference agreed to provisions of the Senate amendment requiring that . . . second, agreements to carry out recommended soil-conservation measures and proper farm plans be obtained from owners of not less than 50 percent of the lands in the drainage area above each retention reservoir."

Section 5

The Act:

"At such time as the Secretary and the interested local organization have agreed on a plan for works of improvement,"

Senate - Bills (H. R. 6788 - Committee Print):

"At such time as the Secretary, the appropriate State agency, and the interested local organization have agreed on a plan for works of improvement,"

(H. R. 6788 as amended by the Senate Committee, same as H. R. 6788 - Committee Print)

Senate - Committee Report:

"This section differs from that passed by the House in several respects. First, agreement by the appropriate State agency is required, in view of the State's natural interest in projects within its boundaries."

Conference Report - The Report:

"The conference struck out language which had been added by the Senate to require that plans for works of improvement must be referred again to 'the appropriate State agency' after their approval by the local organization and the Secretary."

Section 5, Continued

The Act:

" . . . and the Secretary has determined that the benefits exceed the costs,"

House - Bills (H. R. 6788):

" . . . and the Secretary has determined that the flood prevention and soil conservation benefits exceed their costs,"

(H. R. 6788 as amended by the House, same as H. R. 6788)

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as
H. R. 6788)

Senate - Committee Report:

"Second, a requirement that the benefits must exceed the costs has been substituted for the more limited requirement that the flood-prevention and soil-conservation benefits must exceed their costs."

Conference Report - The Report:

"The conference agreed to a Senate amendment broadening the basis for computing benefits in the determination that benefits exceed the cost of the proposed improvements."

Section 5, Continued

The Act:

" . . . and the local organization has met the requirements for participation in carrying out the works of improvement as set forth in section 4,"

Section 5, Continued

The Act:

" . . . the Secretary is authorized to assist such local organizations in developing specifications, in preparing contracts for construction, and to participate in the installation of such works of improvement in accordance with the plan:"

House - Bills (H. R. 6788):

" . . . the Secretary is authorized to participate in the installation of such works of improvement in accordance with the plan:"

(H. R. 6788 as amended by the House, same as H. R. 6788)

House - Committee Report:

"The Secretary is authorized to participate in carrying out the planned works of improvement."

Senate - Bills (S. 2549, same as H. R. 6788)

(S. 2549 - Committee Print):

" . . . the Secretary is authorized to assist such local organizations in developing specifications, in preparing contracts for construction, and to otherwise aid the local organization to undertake the works of improvement pursuant to the agreement between the Secretary and the local organization under the provisions of section 3 of this Act:"

(H. R. 6788 - Committee Print, and H. R. 6788 as amended by the Senate Committee, same as S. 2549 - Committee Print)

Senate - Hearings (pp. 40-41):

"Mr. TRIGGS. It is recommended that section 5 of the bill be amended by amending the language beginning after the comma on line 19, to read as follows:

" * * * the Secretary is authorized to assist such local organizations in developing specifications, in preparing contracts for construction, and to otherwise aid the local organization to undertake the works of improvement pursuant to the agreement between the Secretary and the local organization under the provisions of section 3 of this act: Provided * * *

"Senator HOLLAND. Mr. Chairman, may I ask a question there? Does that mean that the actual construction then would be handled by the local agency?

"Mr. TRIGGS. This is the purpose of the recommendation, yes, sir.

"Senator HOLLAND. What has been the history of the executive projects with which the Department has received it up to now?

"Mr. TRIGGS. I can only repeat from hearsay on that, sir.

"Senator HOLLAND. Has that been handled by the Department?

"Mr. TRIGGS. Both ways.

"Senator HOLLAND. Is there any sound basis for comparison between the results obtained by the two different ways?

"Mr. TRIGGS. I do not believe there is. Not that I know of, anyway. The purpose of this recommendation is to establish the

principle that the local organization is to have the responsibility for constructing the works of improvement. It is suggested that this is essential to carry out the stated purpose of the bill that the 'Federal Government should cooperate with * * * local public agencies * * * '

"The bill provides that the Federal Government shall make the surveys and investigations and to approve the project. If it is further provided that the Federal Government is to undertake the responsibility for construction, the concept of local responsibility and control, which as we understand it is a major purpose of the bill, is diluted pretty thin.

"Senator HOLLAND. In other words, the point is that in spite of all the recitals, the Federal Government has control of everything until the structure is completed and turned over for operation and maintenance?

"Mr. TRIGGS. That is a present possibility under the program. I am not suggesting that it would necessarily be administered that way."

Senate - Committee Report:

"Third, assistance would be limited to aiding the local organizations to undertake the work, whereas the House provision authorizes the Secretary to participate in the installation. Your committee believes that the local character of these projects should be preserved, and that they should not become Federal construction projects."

Senate - Debate (Cong. Rec. June 22, 1954, p. 8171):

"Mr. HOLLAND. The next of the points of difference I have already touched upon, but it is one which is basic to the whole approach which the Senate committee has followed, which is that Federal assistance must always be simply assistance and must be limited to the aid extended to the local organizations which may undertake the work. That contrasts with the House provision which would have authorized the Secretary himself to control the construction, installation, or operation, if necessary, and any other phases of the work which, in his judgment, would be better controlled by a Federal agency.

"It is the hope of the committee that, instead of the bill constituting an invitation for the wide spreading out of a bureau of the Federal Government, it will be considered as providing for a group to render assistance to farm owners who have shown that they prefer to have control of their own destiny,

and to operate under local taxes which they levy on themselves, and to make contributions which are within their means to do the things which are so necessary to the protection of their land and its productivity. This is, of course, a proper national and Federal objective."

Conference Report - The Report:

"The House bill authorized the Secretary to construct or to contract for the construction of structures installed in connection with works of improvement and the Senate deleted this authority."

Conference Report - Agreed to by the Senate (Cong. Rec. July 19, 1954, p. 10428):

"The House authorized the Secretary to construct or contract for the construction of structures included in works of improvement and the Senate deleted such authority."

Section 5, Continued (first proviso)

The Act:

"Provided, That, except as to the installation of works of improvement on Federal lands, the Secretary shall not construct or enter into any contract for the construction of any structure unless there is no local organization authorized by State law to undertake such construction or to enter into such contract, and in no event after July 1, 1956:"

House - Mr. Hope's extension of remarks in explanation of the Act:

"Prior to July 1, 1956, the Secretary of Agriculture is authorized to construct or enter into contracts for construction of structures, providing there is no local organization authorized by State law to enter into such contracts. The Secretary may contract for or construct works of improvement on Federal land; that is, national forests."

Conference Report - The Report:

"The conference agreed to permit the Secretary to undertake or contract for construction of structures only where no local organization is authorized by State law to contract for such installations, and then only until July 1, 1956. Conference language makes it clear, however, that the Secretary has and will continue to have authority to construct or contract for the installation of such structures in connection with such works of improvement as may be necessary on Federal lands."

Conference Report - Agreed to by the Senate (Cong. Rec. July 19, 1954, p. 10428):

"The conference agreed to permit the Secretary to perform such construction or enter such contracts only in those States where local organizations do not have authority to perform such construction or enter into such contracts, and then only until July 1, 1956. The conference further authorized the Secretary to contract for installation of that part of any work which it is necessary to perform on Federal lands."

"Mr. HOLLAND. The fourth point I should like to make is that the philosophies of the two Houses, which differed as to the proper function of the Federal Government, were in some degree compromised for the immediate future. The Senate will recall that in the House bill the construction work was to be done by the Department of Agriculture, or might all have been done by the Department of Agriculture, whereas, in the Senate bill the program was purely an assistance program and the construction work had to be done by or contracted by the local agency, meaning either the district or some State agency which was clothed with the necessary power.

"Having in mind the fact that in some States no appropriate State agency and no appropriate districts now exist which have adequate authority in this field, the conference report allows until June 1, 1956, to States which do not have such a setup, to create such a setup.

"As soon as the law becomes operative, the philosophy of the Senate will be applicable in those States where State agency or local districts now have the authority to enter into contracts for the construction of dams. But in a case where no such authority exists, the State in question is given as long as it may need to come within the requirements of the bill, up to July 1, 1956. It may not have longer than that time.

"It is hoped that States will proceed speedily to allow their districts or their State agencies to operate as quickly

as possible under the spirit of the conference report, which requires the control and the initiative and the contractual power to remain in local hands, in all cases after July 1, 1956, and at once in all cases where that result is now possible."

Section 5, Continued (second proviso)

The Act:

"Provided, That in participating in the installation of such works of improvement the Secretary, as far as practicable and consistent with his responsibilities for administering the over-all national agricultural program, shall utilize the authority conferred upon him by the provisions of this Act:"

House - Committee Report:

"The bill sets out a considered national policy for the planning and execution of this upstream watershed work by the Department of Agriculture in cooperation with States, municipalities, counties, soil-conservation districts, watershed districts and organizations, and any other agencies or political entities authorized by State law to carry out flood prevention and related activities, and individuals. It specifically provides (first proviso of sec. 5) that in carrying out such activities the Secretary of Agriculture shall operate within the limitations and conditions imposed by this legislation."

Section 5, Continued (third proviso):

The Act:

"Provided further, That, at least forty-five days (counting only days occurring during any regular or special sessions of the Congress) before such installation involving Federal assistance is commenced, the Secretary shall transmit a copy of the plan and the justification therefor to the Congress through the President:"

House - Bills (H. R. 6788):

"Provided further, That, before such installation involving Federal assistance is commenced, the Secretary shall transmit a copy of the plan and the justification therefor to the Congress through the President."

(H. R. 6788 as amended by the House):

"Provided further, That, before such installation involving Federal assistance is commenced, the Secretary shall transmit a copy of the plan and the justification therefor to the Congress through the President and shall come into agreement with the Committee on Agriculture and Forestry of the Senate and the Committee on Agriculture of the House of Representatives with respect to such plan."

House - Committee Report:

"Before the installation of such works of improvement is commenced, the Secretary is required to transmit a copy of the plan and justification therefor to the Congress through the President."

House - Debate (Cong. Rec. March 11, 1954, p. 2965):

"Mr. POAGE. Mr. Chairman, I offer an amendment.

"The Clerk read as follows:

"Amendment offered by Mr. Poage: On page 5, line 1, strike out the colon and insert the following: 'and shall come into agreement with the Committee on Agriculture and Forestry of the Senate and the Committee on Agriculture of the House of Representatives with respect to such plan.'"

"Mr. POAGE. Mr. Chairman, this amendment will do nothing other than require the Department of Agriculture to return these projects to the House and Senate committees and leave some degree of supervision in the hands of the House and Senate. The wording is taken from the National Defense Act.

"Mr. AUGUST H. ANDRESEN. Mr. Chairman, will the gentleman yield?

"Mr. POAGE. I yield.

"Mr. AUGUST H. ANDRESEN. I favor the gentleman's amendment and I think it is an excellent idea that after the men in the bureaus have gone over the projects, they should present them to the legislative committees, as is proposed in the gentleman's amendment, and I urge the adoption of the amendment in the interest of conservation.

"Mr. POAGE. I thank the gentleman.

"Mr. HOPE. Mr. Chairman, will the gentleman yield?

"Mr. POAGE. I yield.

"Mr. HOPE. I, like my distinguished colleague, the gentleman from Minnesota, am in accord with the purpose of the amendment. However, the gentleman from Texas may recall that when a similar

bill went down to the Bureau of the Budget for a report the question was raised about a similar provision and we were told that such a similar provision in other previous acts had been held unconstitutional by the Attorney General and two bills had been vetoed which contained provisions of this type. Now, I do not know that the language which the gentleman suggests would necessarily be held unconstitutional by the Attorney General.

"I would like to leave the matter this way as far as I am concerned -- I am not speaking for any other member of the committee, but as far as I am concerned I would be willing to have the Committee of the Whole adopt the amendment and take it to conference. In the meantime, perhaps we can get in touch with the Bureau of the Budget and see what they have to say about this particular form of amendment which the gentleman has submitted.

"Mr. POAGE. I think the gentleman's suggestion is a sound one. None of us wants to jeopardize the validity of the bill. If we can be shown that it does, obviously we will drop it out when we go to conference. But, of course, I do not feel there is anything unconstitutional about the proposal. I know it is the identical wording under which the Armed Services Committee now operates, and I can see no reason why it should not be applicable here. It will give us greater congressional interest in this program if we have this in here, and I believe we need to maintain congressional interest over a period, if we are going to make this program a success."

House - Mr. Hope's extension of remarks in explanation of the Act:

"The Act gives Congress 45 days after receiving the Secretary's report and recommendations in which to take any action which might appear desirable."

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as H. R. 6788)

Senate - Committee Report:

"Section 5 provides that before assistance in the installation of any work may be furnished . . . (3) the plan and the justification therefor must have been transmitted to Congress through the President and 45 session days must have elapsed thereafter.

"This section differs from that passed by the House in several respects . . . Fourth, transmission of the plan to

Congress is required to be made 45 session days before installation is commenced so that Congress may have an opportunity to take any action it might consider appropriate."

Conference Report - The Report:

"The conference adopted a Senate provision requiring the submission of the plan to Congress to be made at least 45 session days before installation is commenced."

Section 5, Continued (fourth proviso)

The Act:

"Provided further, That any such plan (a) which includes reclamation or irrigation works or which affects public or other lands under the jurisdiction of the Secretary of the Interior, or (b) which includes Federal assistance for floodwater detention structures, shall be submitted to the Secretary of the Interior or the Secretary of the Army, respectively, for his views and recommendations at least sixty days prior to transmission of the plan to the Congress through the President. The views and recommendations of the Secretary of the Interior, and the Secretary of the Army, if received by the Secretary of Agriculture prior to the expiration of the above sixty-day period, shall accompany the plan transmitted by the Secretary of Agriculture to the Congress through the President:"

House - Committee Report:

"Before the installation of such works of improvement is commenced, the Secretary is required to transmit a copy of the plan and justification therefor to the Congress through the President. If the plan includes reclamation or irrigation works or affects lands under the jurisdiction of the Secretary of the Interior, or includes Federal assistance for floodwater detention structures, it shall be submitted to the Secretary of the Interior or the Secretary of the Army, respectively, for his views at least 60 days prior to transmission to the Congress. If such views are received by the Secretary of Agriculture within such period they shall accompany the plan transmitted to the Congress."

House - Debate (Cong. Rec. March 11, 1954, p. 2962):

"Mr. HOPE. I think the answer to the gentleman's question is that any proposals that may be submitted by the Secretary of Agriculture have to be submitted to the President and notice has to be sent to the Secretary of the Interior and the Secretary of the Army before this is done, and then 60 days in which to submit a report which must accompany the submission of the project plan to Congress. Now, that means all this has to go through the Bureau of the Budget, and I am sure that was the intention, that if there are any projects there where the coordinated efforts of the different agencies must be carried out, that that will be worked out through the Bureau of the Budget."

House - Mr. Hope's extension of remarks in explanation of the Act:

"If the plan includes reclamation or irrigation work or affects lands under the Secretary of the Interior or if it includes flood-detention structures, the plan must be submitted to the Secretary of the Interior or the Secretary of the Army, respectively, for their views and recommendations at least 60 days before it is sent to the President for transmission to the Congress. The Secretaries of the Interior and Army are not required to approve the plan, but their views, if received by the Secretary of Agriculture prior to the expiration of the 60-day period, are to be transmitted to Congress, along with the recommendations of the Secretary of Agriculture."

Senate - Bills (S. 2549 - Committee Print):

"Provided further, That any such plan which affects land under the jurisdiction of the Secretary of the Interior shall be submitted to him for his views and recommendations at least sixty days prior to transmission of the plan to the Congress through the President."

(H. R. 6788 - Committee Print):

"Provided further, That prior to entering into any agreement under section 3 of this Act to assist in the construction of any works of improvement which include any structure providing a total capacity of 1,000 acre-feet or more, the Secretary of Agriculture shall consult with the Secretary of the Army and the Secretary of the Interior concerning the details of such

structure, and if, within six months after being so consulted, The Secretary of the Army determines and advises the Secretary of Agriculture that such structure will materially affect any Federal flood control or navigation project constructed or authorized to be constructed, or the Secretary of the Interior determines and advises the Secretary of Agriculture that such structure will materially affect any Federal reclamation project constructed or authorized to be constructed, assistance in the construction of such structure shall not be furnished unless the Secretary of the Army, or the Secretary of the Interior, as the case may be, within such six months concurs in the desirability, design, and plan of operation of such structure:"^{5/}

(H. R. 6788 as amended by the Senate Committee):

"Provided further, That any such plan (a) which includes reclamation or irrigation works or which affects public or other lands under the jurisdiction of the Secretary of the Interior, or (b) which includes Federal assistance for flood-water detention structures, shall be submitted to the Secretary of the Interior or the Secretary of the Army, respectively, for his views and recommendations at least ninety days prior to transmission of the plan to the Congress through the President. The views and recommendations of the Secretary of the Interior, and the Secretary of the Army, if received by the Secretary of Agriculture prior to the expiration of the above ninety-day period, shall accompany the plan transmitted by the Secretary of Agriculture to the Congress through the President."

Senate - Hearings (pp. 39, 40):

"Mr. TRIGGS. That the third proviso of section 5 (beginning on line 4, page 5) be revised to read:

"Provided further, That any such plan which affects land under the jurisdiction of the Secretary of the Interior shall be submitted to him for his views and recommendations at least 60 days prior to transmission of the plan to the Congress through the President.

"It is not apparent from reading this that what we have done is cut out a substantial amount of language in the bill. The

^{5/} This proviso was omitted from the Act.

effect of this proposed amendment is to eliminate the need for Interior Department recommendations on projects involving supplemental irrigation of private land and to eliminate the need for Army recommendations on projects involving floodwater detention structures. Our reasons for so recommending are as follows:

"(1) In most States the Department of the Interior and in many States the Army engineers do not have offices or staff experienced or trained in this type of program.

"(2) Projects involving any significant amount of irrigation cannot be constructed under the provisions of this act anyhow because of the restriction in section 4 (2). In those instances where the local organization does desire to undertake reclamation or irrigation features they must rely on other sources for funds -- so there is no call for another Federal agency getting involved.

"(3) Any flood-detention structure constructed under the act is going to be so small as not to be a significant part of the Army Engineers' flood-control program.

"(4) It would appear to be quite in order to leave the question of interagency consultation within the discretion of the Secretary of Agriculture, and this is provided for in section 6 of the bill.

"(5) The history of Agriculture-Army coordination on water-development programs is not such as to warrant confidence in such interagency coordination . . .

"(6) When the Congress directs interagency cooperation this involves staff, personnel, offices, surveys, field trips, investigations, et cetera, by each agency involved. This is costly and in most cases unnecessary. If the Secretary of Agriculture is permitted discretionary authority in this respect, only such duplication as is warranted under the particular conditions existing in a specific case is necessary."

Senate - Committee Report:

"Section 5 provides that before assistance in the installation of any work may be furnished . . . (4) the plan must have been submitted to the Secretary of the Interior if it includes reclamation or irrigation works or affects public lands under his jurisdiction, or to the Secretary of the Army if it includes Federal assistance for floodwater detention structures, at least 90 days before its transmission to Congress, and their views received within that time must be transmitted to Congress with the plan . . .

"This section differs from that passed by the House in several respects . . . Sixth, the time provided for consideration of certain plans by the Secretary of the Interior or the Secretary of the Army has been extended to 90 days from 60 days."

Conference Report - The Report:

"The conference agreed to the 60-day period provided by the House bill (rather than the 90-day period provided by the Senate amendment) for submission of views of the Secretary of the Interior or the Secretary of the Army."

Section 5, Continued (fifth proviso)

The Act:

"Provided further, That, prior to any Federal participation in the works of improvement under this Act, the President shall issue such rules and regulations as he deems necessary or desirable to carry out the purposes of this Act, and to assure the coordination of the work authorized under this Act and related work of other agencies including the Department of the Interior and the Department of the Army."

Senate - Committee Report:

"Seventh, the provision for issuance of regulations by the President has been inserted. While your committee believes that the President has authority to issue such regulations, the importance of effective coordination in this field is such that it was felt specific provision should be made."

Conference Report - The Report:

"The Senate provision that the President shall issue regulations to assure coordination of the work authorized by the act with the related work of other agencies was adopted."

Section 6

The Act:

"The Secretary is authorized in cooperation with other Federal and with States and local agencies to make investigations and surveys of the watersheds of rivers and other waterways as a basis for the development of coordinated

programs. In areas where the programs of the Secretary of Agriculture may affect public or other lands under the jurisdiction of the Secretary of the Interior, the Secretary of the Interior is authorized to cooperate with the Secretary of Agriculture in the planning and development of works or programs for such lands."

House - Bills (H. R. 6788):

"The Secretary is authorized in cooperation with other Federal and with State and local agencies to make investigations and surveys of the watersheds of rivers and other waterways as a basis for the development of coordinated programs. In areas where the programs of the Secretary of Agriculture may affect public or other lands under the jurisdiction of the Secretary of the Interior, the Secretary of the Interior is authorized to cooperate with the Secretary of Agriculture in the planning of works or programs for such lands."

House - Hearings (p. 3):

"Mr. HOPE. This bill I have introduced so that it would be available in printed form for this hearing is similar in most respects to Mr. Poage's bill. However, it embodies amendments to his bill proposed by the Department of Agriculture and embodied in the report on the bill now pending in the Bureau of the Budget, and one provision that is not in any of the pending watershed bills, so far as I am aware.

"That provision embodies our conviction that this is the time for going one step further by repealing the authority the Department of Agriculture now has to conduct surveys and make reports under the Flood Control Act of 1936. It substitutes, in lieu of this specific authority, general authority for the Department to make river basin studies in cooperation with other agencies."

House - Committee Report:

"Section 6 -- Coordinated programs

Authorizes the Secretary in cooperation with other Federal agencies and with State and local agencies to make investigations and surveys of the watersheds of rivers and other waterways as a basis for the development of coordinated programs. If the programs affect lands under the jurisdiction of the Secretary of the Interior, he is authorized to cooperate with the Secretary of Agriculture in planning works for such lands."

Senate - Bills (S. 2549 - Committee Print):

"The Secretary is authorized in cooperation with other Federal and with State and local agencies to make investigations and surveys of the watersheds of rivers and other waterways as a basis for the development of coordinated programs. In States in which the State legislature has designated a State agency to assume responsibility for planning or promoting programs of the type provided for in this Act the Secretary is authorized to enter into cooperative agreements with such agency to further the accomplishment of the objectives of this Act. In areas where the programs of the Secretary of Agriculture may affect public or other lands under the jurisdiction of the Secretary of the Interior, the Secretary of the Interior is authorized to cooperate with the Secretary of Agriculture in the planning of works or programs for such lands."6/

Senate - Committee Report:

"Section 6 authorizes cooperation in watershed investigations and surveys to develop coordinated programs. The Secretary of the Interior is authorized to cooperate in the planning and development of works or programs affecting the lands under his jurisdiction. This section differs from the House provision in that it authorizes the Secretary of the Interior to cooperate in the development of works and programs for lands under his jurisdiction."

Conference Report - The Report:

"The Senate provision authorizing cooperation by the Secretary of the Interior in the development of works on lands under his jurisdiction was adopted."

Section 7

The Act:

. "The provisions of the Act of June 22, 1936 (49 Stat. 1570), as amended and supplemented, conferring authority upon the

6/ The sentence beginning "In States . . . " was omitted from the Act.

Department of Agriculture under the direction of the Secretary of Agriculture to make preliminary examinations and surveys and to prosecute works of improvement for runoff and waterflow retardation and soil erosion prevention on the watersheds of rivers and other waterways are hereby repealed: Provided, That (a) the authority of that Department of Agriculture, under the direction of the Secretary, to prosecute the works of improvement for runoff and waterflow retardation and soil erosion prevention authorized to be carried out by the Department by the Act of December 22, 1944 (58 Stat. 887), as amended, and (b) the authority of the Secretary of Agriculture to undertake emergency measures for runoff retardation and soil erosion prevention authorized to be carried out by section 7 of the Act of June 28, 1938 (52 Stat. 1215), as amended by section 216 of the Act of May 17, 1950 (64 Stat. 163), shall not be affected by the provisions of this section."

House - Bills (H. R. 6788):

"The provisions of the Act of June 22, 1936 (49 Stat. 1570), as amended and supplemented, conferring authority upon the Department of Agriculture under the direction of the Secretary of Agriculture to make preliminary examinations and surveys and to prosecute works of improvement for runoff and waterflow retardation and soil erosion prevention on the watersheds of rivers and other waterways are hereby repealed: Provided, that the authority of the Department of Agriculture, under the direction of the Secretary, to prosecute the works of improvement for runoff and waterflow retardation and soil erosion prevention authorized to be carried out by that Department by the Act of December 22, 1944 (58 Stat. 887), as amended, shall not be affected by the provisions of this section."

(H. R. 6788 as amended by the House, same as H. R. 6788)

House - Hearings (p. 3):

"Mr. HOPE. The bill I have introduced so that it would be available in printed form for this hearing is similar in most respects to Mr. Poage's bill. However, it embodies amendments to his bill proposed by the Department of Agriculture and embodied in the report on the bill now pending in the Bureau of the Budget, and one provision that is not in any of the pending watershed bills, so far as I am aware.

"That provision embodies our conviction that this is the time for going one step further by repealing the authority the

Department of Agriculture now has to conduct surveys and make reports under the Flood Control Act of 1936. It substitutes, in lieu of this specific authority, general authority for the Department to make river basin studies in cooperation with other agencies."

House - Committee Report:

"Section 7 repeals the provisions of the Flood Control Act of 1936, as amended and supplemented, that are applicable to the Department of Agriculture, but retains the authority to prosecute the works of improvement authorized to be carried out by the Department by the Flood Control Act of 1944. This applies to the 11 large watershed projects which have been started by the Department of Agriculture under specific congressional authority. It is intended that the continuing authority to prosecute these projects shall include the authority to prepare and submit to the Congress any review survey reports in connection with such works of improvement that may be authorized by resolution of either the Committee on Public Works of the House of Representatives or the Committee on Public Works of the Senate."

Debate - House (Cong. Rec. March 11, 1954, p. 2962):

"Mr. D'EWART. The second section of the bill says that certain things that affect the Secretary of Agriculture shall not be affected by the provisions of this bill. The Flood Control Act of 1944 is exceedingly important to many districts in the West, including the Missouri Basin. When you limit that provision to the Secretary of Agriculture you have no intention of excluding the authorities granted to the Secretary of War and the Secretary of the Interior; is that a fact?

"Mr. HOPE. Yes. That is certainly true. The gentleman, I presume, is referring to the proviso on page 6; is that correct?

"Mr. D'EWART. That is right, the second proviso.

"Mr. HOPE. The only purpose in putting that proviso in is that 11 projects have been started by the Secretary of Agriculture under the Flood Control Act of 1944. We did not want to interfere with those projects, so we put in this proviso that the act shall not affect them, notwithstanding the repeal of the 1936 provisions.

"Mr. D'EWART. What it actually says is that it shall not affect the Department of Agriculture as it is concerned with the Flood Control Act of 1944, but it does not include the Department of the Interior or the Department of War. It is not the gentleman's intention that those should be excluded?

"Mr. HOPE. No. This act does not intend in any way to affect any of the authority or activities of the two agencies which the gentleman mentioned.

"Mr. D'EWART. That act is important to us."

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as H. R. 6788)

Senate - Committee Report:

"Section 7 repeals the Secretary's authority under the Flood Control Act of 1936 to make preliminary examinations and surveys and prosecute works of improvement for runoff and waterflow retardation and soil-erosion prevention on watersheds, but preserves his authority to prosecute the 11 projects authorized by the Flood Control Act of 1944 and to prosecute emergency measures under the 1938 act. The provisions retaining emergency authority were added by your committee."

Senate - Debate (Cong. Rec. June 22, 1954, p. 8171):

"Mr. HOLLAND. Mr. President, before closing I wish to make it clear that section 7 repeals the Secretary's authority under the Flood-Control Act of 1936, except as to projects which have already been authorized, and some of which are already underway. So it ought to be crystal clear that the bill does mark a very real departure from anything we have done heretofore, and provides for a new project which will have a tremendous impact upon the agricultural population from one side of the Nation to the other."

Conference Report - The Report:

"The Senate provision preserving the authority of the Secretary of Agriculture to undertake emergency measures for runoff retardation and soil erosion prevention under the Flood Control Act of 1938 was retained."

Section 8

The Act:

"There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act, such sums to remain available until expended."

House - Bills (H. R. 6788):

"There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act."

House - Committee Report:

"Authorizes appropriations in such sums as may be necessary to carry out the purposes of the act."

House - Debate (Cong. Rec. March 11, 1954, p. 2964):

"Mr. H. CARL ANDERSEN. Mr. Chairman, I offer an amendment.

"The Clerk read as follows:

"Amendment offered by Mr. H. CARL ANDERSEN: On page 6, line 16, strike out the period and insert a comma and the following: 'Such sums to remain available until expended.'

"Mr. H. CARL ANDERSEN. Mr. Chairman, all the Members will understand that this of necessity must be a continuing program. We on the Appropriations Subcommittee are placed in difficulties if all the money is not expended as of June 30 and the portion not expended is not permitted to continue into the next fiscal year. We are faced with that difficulty right now. I think it is estimated that about \$500,000 will be left available unexpended of the \$5 million that was appropriated last year. This simply makes as a matter of law authorization each year to continue whatever amounts may be available.

"This is a very simple amendment. I hope it will be agreed to."

House - Mr. Hope's extension of remarks in explanation of the Act:

"The method of making appropriations for this work will be determined from time to time by the Appropriations Committees and the Congress. It is anticipated that it will be worked out in such a way that there will be a minimum of delay involved and

that funds for the start of work on a project will be available as soon as the project has been approved and the requirements for submission to the Congress have been complied with."

Senate - Bills (S. 2549 and S. 2549 - Committee Print, same as H. R. 6788)

Section 9

The Act:

"This Act may be cited as the 'Watershed Protection and Flood Prevention Act.'"

Senate - Bills (S. 2549 - Committee Print):

"This Act may be cited as the 'Watershed Protection Act.'"

(H. R. 6788 - Committee Print, same as S. 2549, Committee Print)

Senate - Hearings (p. 41):

"Mr. TRIGGS. In view of the fact that this act will be discussed at many meetings and will be the subject of much correspondence, it would appear desirable from the standpoint of convenience and clarity to give it a name. Perhaps the name of 'Watershed Protection Act' would best describe the purposes of the bill."

Senate - Committee Report:

"Section 9, added by your committee, provides a short title, the 'Watershed Protection Act.'"

Conference Report - The Report:

"The conference changed the short title added by the Senate amendment to 'Watershed Protection and Flood Prevention Act.'"

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APPENDIX

MESSAGE FROM THE PRESIDENT OF THE UNITED STATES RELATIVE
TO A PROGRAM DESIGNED TO CONSERVE AND IMPROVE THE
NATION'S NATURAL RESOURCES

(H. Doc. No. 221, 83d Cong., 1st sess.)

To the Congress of the United States:

In the stress of dealing with urgent problems of peace and security and budget appropriations and tax revenues, we sometimes overlook the fundamental importance to our national well-being of constructive, forward-looking policies designed to conserve and improve the Nation's natural renewable resources.

Before the Congress adjourns, therefore, I believe it will be useful to focus attention on some of our basic land and water resource problems and to point the way for constructive efforts to improve the management and use of these resources.

In my state of the Union message, I called attention to the vast importance to this Nation now and in the future of our soil and water, our forests and minerals, and our wildlife resources. I indicated the need for a strong Federal program in the field of resource development. At the same time I pointed to the necessity for a cooperative partnership of the States and local communities, private citizens, and the Federal Government in carrying out a sound natural-resources program.

In addition to the immediate danger of waste resulting from inadequate conservation measures, we must bear in mind the needs of a growing population and an expanding economy. At present we are faced with excess reserves of some agricultural commodities and the need for production adjustments to gear our agricultural economy to current demands. But in the long run, we shall need to give increased attention to the improvement and reclamation of land in its broadest aspects, including soil productivity, irrigation, drainage, and the replenishing of ground-water reserves, if we are adequately to feed and clothe our people, to provide gainful employment, and to continue to improve our standard of living.

Our basic problem is to carry forward the tradition of conservation, improvement, and wise use and development of our land and water resources -- a policy initiated 50 years ago under the leadership of President Theodore Roosevelt. To do this within the framework of a sound fiscal policy and in the light of defense needs will require the maximum cooperation among the States and local communities, farmers, businessmen, and other private citizens, and the Federal Government. It will require the development of clear guidelines to be established by the Congress as to the proper functions of the Federal Government. It will require the revitalization of renewable resources by users who should be entitled to reasonable assurances in connection with authorized uses. It will require adherence to sound principles for the financing and the sharing of the

cost of multiple-purpose land and water resources development. It will require improved Federal organization to accomplish a more logical division of responsibilities among the various Federal agencies in order that resource development programs may be carried on with the greatest efficiency and the least duplication. And it will require comprehensive river basin planning with the cooperation of State and local interests.

This administration is moving ahead in the formulation of sound organization and improved policies for the use of our soil, our public lands, and our water resources. I have requested, and the Congress has granted through Reorganization Plan No. 2, increased authority for the Secretary of Agriculture to improve the organization of the Department of Agriculture. I have recently established by Executive order a National Agricultural Advisory Commission. A review is being made of the basic power policies of the Federal Government in connection with multiple-purpose river basin development as it relates to private economic development. The Corps of Engineers is making a study of the basis for State and local financial participation in local flood-protection works. There are under detailed study various proposals for dealing with the complicated problems of overlapping and duplicative authority among the several resource-development agencies. And the Bureau of the Budget and the resource agencies are reviewing the present standards and procedures for evaluation and cost allocation of water resource development projects.

It is fortunate that today there is a growing recognition on the part of land users and the public generally of the need to strengthen conservation in our upstream watersheds and to minimize flood damage. Inadequate conservation measures and unsound land-use patterns vastly increase the danger of loss of valuable topsoil from wind erosion in time of subnormal rainfall and from water erosion in time of floods.

This could be done as an integral part of our total flood-control and water-use program. In our past efforts to better utilize our water resources, to control floods and to prevent loss of life and property, we have made large investments on the major waterways of the Nation. Yet we have tended to neglect the serious waste involved in the loss of topsoil from the Nation's farms and the clogging of our streams and channels which results from erosion on the upper reaches of the small streams and tributaries of the Nation's rivers.

It is important, too, for groups of farmers banded together in local organizations, such as soil-conservation districts and watershed associations, to take the initiative, with the technical advice and guidance of the appropriate Federal and State agencies in developing adequate plans for proper land use and resource improvement in watersheds throughout the Nation. As these plans are prepared and local agreement and cooperation are assured, I believe that we should move ahead in the construction of works of improvement and the installation of land-treatment measures as rapidly as possible consistent with a sound overall fiscal program.

As we move forward in a cooperative and coordinated soil and water conservation program, we must not overlook the essential role played by the Federal Government in the management of public lands. Approximately 50 percent of the land area of the Western States is owned and managed by a number of Federal agencies. The National Park Service administers parks and monuments having national significance. The Forest Service administers the national forests, with their valuable timberlands and grazing resources, and in cooperation with State and local interests protects critical watersheds. The Bureau of Reclamation and the Corps of Engineers manage lands in connection with water-resource projects built by these agencies. Fish and wildlife are protected by the Fish and Wildlife Service. The Bureau of Indian Affairs administers Indian lands, and the great public domain remaining is administered by the Bureau of Land Management.

The Federal Government has a responsibility to manage wisely those public lands and forests under its jurisdiction necessary in the interest of the public as a whole. Important values exist in these lands for forest and mineral products, grazing, fish, and wildlife, and for recreation. Moreover, it is imperative to the welfare of thousands of communities and millions of acres of irrigated land that such lands be managed to protect the water supply and water quality which come from them. In the utilization of these lands, the people are entitled to expect that their timber, minerals, streams and water supply, wildlife and recreational values should be safeguarded, improved and made available not only for this but for future generations. At the same time public lands should be made available for their best use under conditions that promote stability for communities and individuals and encourage full development of the resources involved.

While, as I have indicated, our major problem is to carry forward a tradition of improvement and conservation of our natural resources, the best means of achieving this objective depends on keeping up with changing conditions. For example, the problems of water-resource development in the West are undergoing considerable change. The pattern of western growth has broadened substantially in recent years. Industrial expansion has been extensive and varied. Increased activities in mineral and fuel processing have occurred. Urban expansion has been well above the national average in many communities. These developments have brought about strong competition for existing water supplies and have stimulated the need for a broader approach in planning new water resource developments. As a consequence, the Federal role in the cooperative development of these resources should now be reexamined in the interest of achieving a better balanced program for western growth.

Conserving and improving our land and water resources is high priority business for all of us. It is the purpose of this administration to present to the next session of the Congress suitable recommendations for achieving the objectives set forth in this message. I am confident that the studies of governmental organization and functions authorized by this

Congress can also make an important contribution to the solution of these problems. As the Congress moves ahead on a constructive legislative program in the resource field, it will have my full support and cooperation. We must build a balanced program for the use and development of all our natural resources. Such a program is indispensable to maintaining and improving our standard of living as we make the future secure for a growing America.

DWIGHT D. EISENHOWER.

THE WHITE HOUSE, July 31, 1953

LETTER FROM THE SECRETARY OF AGRICULTURE

August 5, 1953.

Hon. Clifford R. Hope,
Chairman, Committee on Agriculture,
House of Representatives.

Dear Mr. Hope: In response to your request, we are glad to submit our views on H. R. 6788, a bill to authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes.

The Department strongly endorses H. R. 6788 and recommends its enactment by the Congress.

The bill would authorize the Secretary of Agriculture to cooperate with and assist local organizations, including State governments and local agencies such as soil-conservation districts, conservancy districts, and flood-control districts, upon their request, to prepare and carry out plans in small watersheds for works of improvement in the field of flood prevention, and agricultural phases of the conservation, development, use and disposal of water.

The bill contains the sound principle of local initiative and responsibility. It would, we believe, encourage local participation in both planning and sharing of costs for the installation of works of improvement. The bill would provide a simple, workable, and economical mechanism for Federal cooperation with local people in achieving their objectives of land and water management in the small watersheds of the Nation. Its passage would constitute a clear-cut mandate from the Congress to this Department to move ahead with the program of assistance that is now being sought by scores of local organizations in every section of the country.

The type of assistance to be provided by the Federal Government, through the Department of Agriculture, would be in accord with principles previously established by the Congress for national programs administered by this Department. Under these principles, this Department extends technical services and financial aid to individuals, local agencies, and States in the field of land and water management, conservation, and utilization. The Department also administers the national forests and certain other public lands for watershed protection and other purposes.

The dominant purpose of watershed plans provided for by the bill would be flood prevention and water management. At the same time the bill provides adequate authority for integrating other related needs for the management of land and water resources. It does not provide authority for the acquisition of any land by the Federal Government. The bill provides for cooperative effort by States and local agencies and the Federal Government in a unified manner for the improvement of cropland, rangeland,

forest land and wildlife, and for the management of water within small watersheds. When they are component parts of a larger watershed that forms a logical planning unit, a number of these watersheds may be included in a single integrated plan.

Provision is made in the bill for obtaining the views of the Secretaries of the Interior and of the Army on plans which contain certain specific features.

Section 6 provides authority for the Department, coordinate with that of other Federal agencies, to make investigations and surveys in cooperation with other Federal and with State and local agencies. We believe that it is important for the Department to continue to have such authority in order that it can carry out its responsibilities in making comprehensive river basin investigations and other resource development surveys. This section would provide a legislative directive for this Department to make such investigations as may be necessary to evaluate the aggregate effect of watershed programs on flood flows and water supply in the main river valleys of the country, and to use this data in its own planning and to provide such data to other agencies for developing projects on rivers and other waterways.

On enactment of the provisions contained in sections 1 through 6 of the bill, the Department would no longer need the authority conferred by the act of June 22, 1936, as amended and supplemented, except with respect to the works of improvement for runoff and waterflow retardation and soil-erosion prevention authorized to be carried out by the Department by the act of December 12, 1944, as amended. We, therefore, have no objection to section 7 which, with the above-mentioned exception, would concurrently repeal the provisions of the act of June 22, 1936, relating to the Department of Agriculture.

We note that the bill would lodge responsibility in the Secretary for carrying out its provisions. This authority provides sufficient flexibility to permit the assignment of agency responsibilities so as to carry out the provisions of the bill with the greatest effectiveness. To accomplish this objective, it is my intention to use primarily the Soil Conservation Service and the Forest Service.

The Bureau of the Budget advises that there is no objection to the submission of this report.

Sincerely yours,

E. T. BENSON, Secretary.

LETTER FROM THE ACTING DIRECTOR, BUREAU OF THE BUDGET

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C., August 31, 1953.

Hon. Clifford R. Hope,
Chairman, Committee on Agriculture,
House of Representatives, Washington 25, D. C.

My Dear Mr. Chairman: This is in response to your request for the views of the Bureau of the Budget on H. R. 6788, a bill to authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes.

This bill is similar to H. R. 4877, on which the views of the Department of the Army and the Department of the Interior, as well as the Department of Agriculture, were obtained by the Bureau of the Budget. It would repeal the present authority of the Department of Agriculture under the Flood Control Act of 1936, as amended and supplemented, to make preliminary examinations and surveys to construct works of improvement for waterflow retardation and soil-erosion prevention. It would enact new and broader authority for the Department to carry on upstream watershed-conservation and flood-prevention work. The Secretary of Agriculture would be authorized to make investigations and surveys and to enter into agreements with States and local organizations to furnish financial and other aid in the construction of works of improvement "for flood prevention, including structural and land-treatment measures, and agricultural phases of the conservation, development, utilization, and disposal of water in watershed or subwatershed areas."

Although formal reports have not yet been received from the Departments of the Army and Interior on H. R. 6788, the Bureau, on the basis of its own analysis, believes that the revised bill meets many of the objections which were raised in connection with H. R. 4877.

Section 2 of the bill limits works of improvement to structures and measures in "watershed or subwatershed areas not exceeding 520,000 acres and not including any single structure which provides more than five thousand acre-feet of total capacity." This provision would restrict the authority of the Secretary of Agriculture to small structures and land-treatment measures in the upstream areas of the Nation's watersheds and would not conflict with the authority of the Secretary of the Army and the Corps of Engineers to build flood-control and related structures on the major river channels.

Section 4 of the bill specifies "That no part of the construction cost for providing any capacity in structures for purposes other than flood prevention and features related thereto shall be borne by the Federal Government under the provisions of this Act." This provision, coupled with limitations on the size of structures, would prevent overlapping with the authority of the Bureau of Reclamation in the Department

of the Interior to undertake irrigation projects. While the Secretary of Agriculture would have authority to cooperate with State and local groups in building small structures in upstream areas which might serve multiple purposes, the Federal Government under this bill would not be permitted to bear any of the costs of structures and features related thereto for other than flood-prevention purposes. Costs allocated to other purposes such as irrigation or water supply would be borne entirely by State, local, and private interests.

Section 5 provides "That, before such installation involving Federal assistance is commenced, the Secretary shall transmit a copy of the plan and justification therefor to the Congress through the President." This procedure would help to reduce the heavy legislative burden on the Congress by avoiding the necessity for separate authorization of each individual small project. The Congress would retain control of the level of the program through annual appropriations, and proposed projects would be reviewed by the Executive Office of the President under Executive Order 9384.

In his message of July 31, 1953, the President indicated the need for strengthening soil-conservation and upstream flood-prevention programs. He emphasized the necessity for cooperation of the States and local communities, private citizens, and the Federal Government in carrying out a sound conservation and watershed-protection program. In our judgment the purposes of H. R. 6788 would be consistent with the view of the President that "We should move ahead in the construction of works of improvement and the installation of land-treatment measures as rapidly as possible consistent with a sound overall fiscal program."

Therefore, the Bureau of the Budget recommends favorable consideration of H. R. 6788 by your committee.

Sincerely yours,

ROWLAND HUGHES, Acting Director.

DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

WASHINGTON

June 1, 1954

Honorable George D. Aiken
Chairman, Committee on
Agriculture and Forestry
United States Senate

Dear Senator Aiken:

The Department of Agriculture has given careful consideration to the bill, H. R. 6788, An Act "To authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes" as reported by your subcommittee.

On May 5, 1954, Director Rowland Hughes wrote to the Secretary of Agriculture transmitting recommendations on specific amendments in a marked copy of H. R. 6788 as it was approved by the House of Representatives. Copies of this were placed in your hands as requested by Mr. Hughes with the advice that the President recommends the incorporation of such amendments. The Department of Agriculture supports the President's position on these amendments.

The following comments apply to the amendments shown in the Committee Print dated May 22, 1954:

The Department feels that the amendment to Sec. 3 (3) beginning on line 22, page 3, and ending on line 6, page 4, would be undesirable. The effect of this amendment would be to establish a new basis for cost-sharing in resource development projects that would apply only to structures installed under the authority of this bill. It would establish a formula for cost-sharing different than the provisions of the Reclamation Laws, and the Flood Control Acts and other existing acts applicable to this Department, including those authorizing present watershed operations. This amendment would be inconsistent with Sec. 4 (2) which provides that local organizations shall "assume such proportionate share of the cost of installing any works of improvement involving Federal assistance as may be determined by the Secretary to be equitable in consideration of anticipated benefits from such improvements." The rigid standard imposed would result in inequitable and unfair treatment of local landowners and communities in those cases where benefits accruing to them from specific structures were substantially less than 50 percent of the total benefits from such structures. Experience of this Department has indicated that, in numerous cases, more than 50 percent of the benefits from specific structures will

accrue downstream from and outside of the project area represented by sponsoring organizations. In many cases these benefits will accrue to Federal and other public investments by prevention of silting in major downstream reservoirs and protection of other main stream improvements.

The Department also feels that the amendment to Sec. 5, lines 2 to 7, page 6, would be undesirable. The effect of this amendment would be to prohibit the Department of Agriculture from installing any structures by either contract or force account. Your attention is called to the recommendation of the President relating to this point as set forth in a letter from the Director of the Bureau of the Budget dated May 5, 1954, to the Secretary of Agriculture, which provides for utilizing local organizations to the fullest practicable extent in preparing and letting contracts for construction of works of improvement. In many States local districts and other organizations with which the Department might cooperate in carrying out the purposes of this bill do not now have adequate authority under State laws to enter into contracts for the installation of the types of structures that would be authorized by the bill. This fact would seriously retard the program from being carried out in such States.

The Department further feels that the amendment to Sec. 5, beginning on line 9, page 7, and ending on line 2, page 8, would be undesirable. Your attention is directed to the fact that this amendment is in direct conflict with the provisions of the succeeding amendment recommended by the President and contained in lines 3 to 9, page 3, in which the President is required to issue such rules and regulations as he deems necessary for the purpose of coordinating the work to be undertaken by this Department under the proposed legislation.

The Department recommends that the Committee Print be amended in accord with the views expressed above.

We are advised by the Bureau of the Budget that if the bill is amended in accordance with the recommendations expressed in this report, enactment of H. R. 6788 would be in accord with the program of the President.

Sincerely yours,

J. EARL COKE

J. Earl Coke
Assistant Secretary

AUGUST 17, 1954

JAMES C. HAGERTY, PRESS SECRETARY TO THE PRESIDENT

THE WHITE HOUSESTATEMENT BY THE PRESIDENT

I am happy today to sign into law the amendment to the Water Facilities Act.

This is one of three legislative actions taken by the 83rd Congress which give important new strength to our national efforts to conserve the vital water and soil resources of the United States. This legislation is of high significance in the movement which came to life fifty years ago when Theodore Roosevelt gave new meaning to the word "conservation."

This legislation is significant because it gives new stimulus to local initiative and establishes for the first time a nation-wide program of conservation practices based on the concept that farms, streams, forests, and towns are all inter-related parts of a watershed. It recognizes in practical terms that the upstream part of the watershed, as well as the downstream part, must be taken into our plans if we are to have the water we vitally need and if we are to solve with maximum effectiveness three of our most challenging problems -- soil erosion, floods and drought.

The first of these bills is the Watershed Protection and Flood Prevention Act. This Act recognizes by law for the first time the great importance of upstream watershed protection in our over-all water resource policy. For the first time also, this Act provides a broad program of Federal technical and financial assistance to such local watershed groups as are willing to assume responsibility for initiating, carrying out, and sharing the costs of watershed protection which will help conserve water for agricultural uses and supplement any needed downstream flood control measures.

The second bill amends the Water Facilities Act. Formerly limited to the 17 Western states, the program established by this Act makes available, throughout the entire nation, loans for developing agricultural water improvements on farms and ranches. In addition, this law establishes a program of direct or insured loans for drainage facilities, reforestation, and other water and soil conservation measures. Farmers and ranchers frequently need credit to take care of the initial investments required in establishing conservation systems, or to tide them over an adjustment period while they shift to a better and, in the long run, more profitable type of land use. These new credit provisions, specially geared to conservation needs, provide a significant means of encouraging and advancing soil and water conservation.

The third legislative action is part of the Congressional revision of the internal revenue laws. It allows farmers and ranchers to treat expenditures for a number of soil conservation measures as current annual expenses which may be deducted from farm income in computing income taxes. This Act therefore gives farmers new

tax advantages on these land improvement measures. Not only will these advantages benefit the farmer financially; they will also add incentive to the application of soil and water conservation measures.

These three bills rest on several sound principles.

First, we recognize that it is absolutely urgent to conserve and improve our water resources. For water is essential to every part of our life, and in quantities that are usually unsuspected. It takes 18 barrels of water, for example, to refine a barrel of oil. It takes 85,000 gallons to produce a ton of rubber. It takes something like 800,000 gallons of water to mature an acre of cotton. It takes some 1,300 gallons of water each day to supply the direct and indirect needs of each one of our citizens. As our population increases, so will these demands.

Even these statistics do not drive home the urgency of adequate water supplies nearly so well as the personal experiences many Americans have had this very summer -- of insufficient water for crops and livestock, of failing wells, of restrictions on use of water in towns. Some of our cities have had to seek means of supplementing their failing or depleted reservoirs. Some have had to haul water from nearby streams. In rural areas, there has been a growing call for water for irrigation. These facts add up to a hard warning: we cannot afford to waste water.

Any attempt to conserve this water should take into account a key fact: that this all-important water -- the water we use on our farms, in our homes, in our businesses, or in our factories -- has been collected from all the lands of the watershed, beginning at its uppermost limits. Our streams, our deep wells, our storage reservoirs are merely accumulations of water that has fallen on the land in the form of rain or snow. Some of it runs off in creeks and rivers. Some of it evaporates. Some soaks in to nourish crops and trees. Some finds its way into springs or into the sands we tap with our wells. How much water runs off, and how fast, and how much soaks in to feed crops and springs -- these quantities depend in large measure on what kind of land it falls on, what this land is used for, and what kind of cover -- trees, grass -- the land has.

For this reason our water management programs must not go to work only in large streams or rivers, though the flood control and other measures there are of enormous importance. Our programs to conserve water must begin where the raindrop falls. And because of the extensive erosion and sedimentation damage which result from floods in headwater streams and small tributaries, and also because these parts of the watershed have up to now been relatively neglected in conservation planning, these programs must put new emphasis on their management.

Under the Watershed Protection and Flood Prevention Act, sound soil conservation plans will be developed to establish the right use for each kind of soil on all the farms of a watershed. Soil conservation will be supplemented where necessary with small detention dams, channel improvements, or other measures to protect the fertile bottom land along these small streams.

These measures will be of pronounced benefit to agriculture. More and more American farmers are coming to realize that good land use and land treatment can help them to conserve water as well as soil. They are seeing the advantages of inducing as much water as possible to soak into the ground where it falls -- water which

will help grow crops and help recharge underground water supplies that are tapped by farms and by cities and industries. Thus an accelerated soil conservation and watershed program will also benefit urban centers by helping to keep sediment from cutting down the storage capacity of our large city reservoirs. It will reduce the amount of silt that has to be filtered from water before it can be used by city water systems or by industry. And it will help lessen the damage caused by drought and thus help stabilize areas where this hazard has been unusually severe.

Another significant contribution of the watershed legislation is that it gives new force and emphasis to local leadership. Its programs are not Federal work projects; no new agencies will have to be created to carry them out. These programs will be planned only at the instance of local people. They will be planned with the cooperation and participation of local and State governments. They will be initiated only when local people have demonstrated their willingness and ability to share equitably in the cost and to assume responsibility for direction and maintenance of the work.

The watershed and water development programs will also encourage a new and improved means of local-State-Federal teamwork. Locally, rural and urban interests must join forces in sponsoring and contributing to the programs -- contributing the funds, labor, materials, lands, easements, and other needs that can best be supplied by local organizations. State and county governments are also involved. Floodwater retarding dams, sediment control structures, channel stabilization measures and the like, on the tributary streams, represent measures which individuals cannot be expected to install by themselves, and which may properly require state or even federal aid because their benefits extend beyond the local community. The Federal Government also has a major role in providing technical, research, financial, and educational assistance.

To do this work, all levels of government and private endeavor must cooperate. And there will be a call for increased effort in the future. Because our population is growing rapidly, the demands upon the nation's soil and water resources are bound to become heavier in the years ahead. But we do have the resources to match this growth if we manage them wisely. In the long run, it is absolutely vital to the welfare of farm and urban people, and to the strength of the entire nation, that we work soundly and vigorously to protect and develop our nation's vital water supplies and the related resources of farm land, range, and timber. In such a matter of national interest, we must act with effectiveness. These three measures show that we have so acted.

83d Congress
2d Session
COMMITTEE PRINT

WATERSHED CONSERVATION AND FLOOD PREVENTION

A Discussion of the Watershed Protection and
Flood Prevention Act with Questions and Answers
Pertaining to the New Program

August 25, 1954

The following discussion of the Watershed Protection and Flood Prevention Act with questions and answers pertaining to the new program was prepared by the Soil Conservation Service of the Department of Agriculture at the request of the Committee on Agriculture.

CLIFFORD R. HOPE
Chairman

Questions and Answers on the
Watershed Protection and Flood Prevention Act
(Public Law 566, 83d Cong., ch. 656, 2d sess.)

The Hope-Aiken Watershed Protection and Flood Prevention Act was passed to help meet the needs of local people who are faced with small watershed problems. The act:

1. Places responsibility in local organizations to initiate programs, adapt plans to local requirements, share in the costs, and make provisions for the plan's application and maintenance.
2. Gives farmers a specific means to get United States Department of Agriculture technical help to work out watershed-treatment plans.
3. Provides for Federal cost sharing on small waterflow-retarding dams and other flood-prevention and water-management measures.
4. Gives the Secretary of Agriculture new opportunities to serve local small watershed groups.

In connection with his approval of the bill, President Dwight D. Eisenhower stated:

The act recognizes by law for the first time the great importance of upstream watershed protection in our overall water resource policy. For the first time also, this act provides a broad program of Federal technical and financial assistance to such local watershed groups as are willing to assume responsibility for initiating, carrying out, and sharing the costs of watershed protection which will help conserve water for agricultural uses and supplement any needed downstream flood-control measures.

The House Committee on Agriculture publishes the following questions and answers to help meet the demand for preliminary information relating to the act and its practical application.

Purpose

1. Q. What is the act's primary objective?
A. To provide the basis for a program by which local groups can cooperate with and receive assistance from the Federal Government in solving their flood-prevention and water-management problems.
2. Q. Does the act provide the Secretary of Agriculture with additional opportunities to serve local watershed groups?
A. Yes. It authorizes him to cooperate with States and local agencies in carrying out jointly planned and mutually agreed on flood-prevention and water-management projects.
3. Q. What are the guiding principles in extending Federal help under the act?
A. Local people are expected to bear at least an equitable share of the cost and to ask the Secretary of Agriculture only to supplement their resources by supplying that additional part which is necessary to make the project possible but which cannot be provided from resources available in the watershed and the State. The greater the share of the cost that local people assume, the better their opportunity to receive the assistance they need to carry through the project.
4. Q. Does this legislation duplicate or overlap other national conservation programs?
A. No. Federal help under the act is available only to assist local organizations to plan and install needed water-management and flood-prevention measures that cannot feasibly be installed under other current Federal conservation programs.

Definitions

5. Q. What is a watershed under the act?
A. All land and water within a natural drainage area of 250,000 acres or less.
6. Q. What are "works of improvement" under the act?
A. Any undertaking for:
(1) Flood prevention (including structural and land-treatment measures) or
(2) Agricultural phases of the conservation, development, utilization, and disposal of water (including measures for irrigation and drainage).
7. Q. What is a watershed work plan?
A. It is a plan for works of improvement referred to in the act.
8. Q. How does the act define "local organization"?
A. " * * * Any State, political subdivision thereof, soil- or water-conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out, maintain, and operate works of improvement."

Federal assistance

9. Q. What kinds of Federal assistance are authorized under the act?
A. Technical help in working out and applying a watershed "work plan," and determining its feasibility; also funds for the equitable Federal share of the costs of installing the needed flood-prevention and water-management measures. Storage capacity for other than flood prevention must be paid for from non-Federal funds.

10. Q. What about any public lands involved?

- A. Works of improvement will be planned for all lands within a watershed regardless of ownership. Where structural measures benefiting private lands are installed on Federal lands, the Federal share of the construction cost will be determined on the same basis as if such improvements were installed on private lands. The Federal Government will bear the entire cost of all land-treatment measures on Federal lands.

Limitations

11. Q. What is the maximum size watershed that can be treated under the act's provisions?

- A. The watershed must not exceed 250,000 acres. Two or more adjacent watersheds, when they comprise parts of a larger watershed, may be planned together, if the local sponsoring organizations so desire, even though the combined area exceeds 250,000 acres.

12. Q. What size structures can be built?

- A. Single structures are limited to a total storage capacity of 5,000 acre-feet. Watershed work plans including any structure of more than 2,500 acre-feet total capacity must be approved by the House and Senate Agriculture Committees before appropriations may be made for the project. Watershed work plans which do not include any structure of more than 2,500 acre-feet total capacity do not require such approval.

13. Q. What about irrigation or drainage works?

- A. Assistance will be restricted to irrigation and drainage facilities which benefit more than a single farm and which can be planned and carried out as a part of a watershed project. Priority will be given for increasing the efficiency of land use of existing farms. Irrigation or drainage of land not previously or now used for farming shall be incidental and not a primary purpose of any assistance so provided. Storage capacity specifically for water for irrigation must be paid for from non-Federal funds.

14. Q. What about municipal water supply?

- A. Storage for municipal water supplies may be included as part of the watershed work plan, but structural costs above those necessary for flood prevention must be paid from non-Federal funds.

15. Q. What about recreation?

- A. Many opportunities for recreation developments will arise incidental to the works of improvement. But the costs of developing of recreational facilities must be borne by non-Federal sources.

16. Q. Must projects be completed within a specified time?

- A. The installation time will be set forth in the work plan, as agreed upon by the local organization. The objective will be to complete projects in 5 years or less, subject to the availability of funds.

Procedures

17. Q. How would any local organization, such as a soil-conservation district, initiate action under the act?

- A. Formal application blanks and suggestions for filling them out will be available in each State through offices of the Soil Conservation Service, Federal and State Forest Services, Extension Service, and the State agency

designated by the Governor to act on applications. The local organization would simultaneously submit an application for planning assistance to the Governor or State agency designated by him and to the State office of the Soil Conservation Service.

18. Q. At what stage do the Soil Conservation Service and the Forest Service begin to assist the local organization in developing a watershed work plan?
- A. After the Soil Conservation Service, acting for the Secretary, has approved the project for planning. This approval can be given only after approval of the local organization's application by the authorized State agency or Governor, or after 45 days if no action is taken on the application by the State agency or Governor.
19. Q. What happens if the Governor or his authorized agency turns down the local organization's application?
- A. The Department of Agriculture will halt activity.
20. Q. When the kinds, quantities, and costs of needed works of improvement have been agreed on by the local organizations and the Department of Agriculture what is the next move?
- A. The local organizations and the Secretary of Agriculture then must agree on the work plan which sets forth the shares of the costs that will be met from non-Federal and Federal sources.
21. Q. If a satisfactory watershed work plan is developed, what is the next step?
- A. The plan is transmitted to the Administrator of the Soil Conservation Service acting for the Secretary of Agriculture. A period of up to 60 days is then provided to the Secretaries of the Army and Interior, if they are concerned in which to review and comment on the plan. The Secretary of Agriculture then forwards the plan to the Congress, through the President, together with any recommendations of those agencies. Forty-five days during which the Congress is in session must then elapse before any installations involving Federal assistance are begun. In addition, as noted in the answer to question No. 12 above, if the plan includes any structures larger than 2,500 acre-feet total capacity, it must be approved by the House and Senate Agriculture Committees before appropriations can be made.
22. Q. How will Federal money become available for work authorized under the act?
- A. By appropriation. A supplemental appropriation of \$1,750,000 was made for the fiscal year 1955 to initiate planning and other work.

Local participation

23. Q. What about the needs and interests of people who live in the watershed?
- A. They initiate action. They participate in the development of the watershed work plan. They have the responsibility for seeing that the recommended program is in conformance with their wishes.
24. Q. What minimum requirements must local people meet?
- A. They must acquire necessary land, easements, or rights-of-way; assume an equitable share of the project's cost; arrange for operation and maintenance; acquire necessary water rights; and get agreements from owners of not less than half of the lands in drainage areas above dams to carry out soil conservation programs.

Feasibility

25. Q. How will economic soundness of projects be determined?
A. Department of Agriculture agencies will use recognized techniques in making necessary studies to determine the costs and benefits of each proposed project to establish its economic soundness.
26. Q. How will the findings of such studies be applied?
A. The findings will establish the nature and extent of local and other benefits and afford a means for determining an equitable sharing of costs between non-Federal and Federal sources of funds.

Contracting works of improvement

27. Q. Who will contract for the construction of dams?
A. The act gives the Secretary of Agriculture authority to contract for the construction of dams until July 1, 1956, in those States in which local organizations do not have authority to enter into such contracts. In States where local organizations have such authority they will, from the start, contract for necessary dams.
28. Q. Do the present State laws authorize soil-conservation districts or other local organizations to contract for dams to be built under this act?
A. Since State soil-conservation district enabling acts vary, State attorneys general will have to provide specific answers to this question. Some States apparently will need to pass new enabling legislation or to amend existing legislation in order to facilitate work under the act.
29. Q. What requirements and procedures will apply to contracting by local organizations?
A. (1) The local organization must have adequate facilities for arranging for, letting, and servicing construction contracts.
(2) The local organization must have legal authority to act as the contracting agency.
(3) In choice of contractors, the local organization will use the same basis for bid acceptance as the Department of Agriculture.
(4) Federal funds will be used only for payments for installation of works of improvement.
(5) All work must be done in accordance with plans and specifications approved by the Department of Agriculture as set forth in the contract. This will include all changes made in the contract during construction. Payment will not be made for any unauthorized work or work done outside the terms of the approved contract.
(6) The Department of Agriculture will be responsible for on-the-job inspection.

The watershed work plan

30. Q. What features will the watershed work plan include?
A. In addition to the plan for treating the watershed, it will include a schedule of operations, the cost, cost-sharing arrangements, and justification for establishing and maintaining the measures needed for the protection and improvement of the watershed.

31. Q. What are some of the primary purposes of the watershed work plan?
- A. To inform the President, the Congress, and the public of the needs and desires of the local people and of the plans of the Department of Agriculture to expend Federal funds on the watershed project. Also to justify such expenditures in accordance with national authorities, policies, and regulations. The work plan is the official document upon which approval of expenditure of funds is based. It records the responsibilities agreed to by the local organization for carrying out and operating and maintaining a complete program of watershed protection and improvement within a given period.

Synopsis of the
Watershed Protection and Flood Prevention Act
Public Law 566 - 83d Congress
Chapter 656 - 2d Session
H. R. 6788

An act to authorize the Secretary of Agriculture to cooperate with States and local agencies in the planning and carrying out of works of improvement for soil conservation, and for other purposes.

Section 1 states that it is the policy of the Congress that the Federal Government should cooperate with local public agencies to prevent erosion, floodwater and sediment damages and further the conservation, development, utilization and disposal of water.

Section 2 defines the terms "Secretary," "works of improvement," and "local organization." It limits the total capacity of any single structure to 5000 acre-feet, but specifies that no appropriation shall be made for any structure in excess of 2500 acre-feet of total capacity unless the plan has been approved by resolutions adopted by the Senate and House agricultural committees.

Section 3 provides that local organizations desiring aid in planning and installing works of improvement shall make application for such aid to the Secretary, but that such applications must first be submitted to, and not disapproved within 45 days by, the State agency having jurisdiction over the programs provided for in this Act, or by the Governor if there is no such State agency. Upon receipt of such applications the Secretary is authorized to (1) conduct investigations and surveys necessary for the preparation of plans for works of improvement, (2) make studies to determine the economic soundness of such plans, including a determination as to whether benefits exceed costs, (3) cooperate and enter into agreements with and provide financial and other assistance to local organizations, except that for land-treatment measures the rate of assistance shall not exceed that given for similar practices under existing national programs, and (4) obtain the cooperation and assistance of other Federal agencies.

Section 4 provides that before receiving assistance for installation local organizations shall (1) acquire without cost to the Federal Government all land, easements and rights-of-way needed, (2) assume an equitable share of the cost of installing works of improvement as determined by the Secretary, except that the Federal Government is not authorized to pay any part of the construction costs for providing any capacity in structures for purposes other than flood prevention, (3) make arrangements satisfactory to the Secretary, in accordance with established regulations, for operating and maintaining the works of improvement, (4) acquire any necessary water rights pursuant to State law, and (5) obtain soil conservation agreements from 50 percent of the farmers in the drainage area above each retention reservoir.

Section 5 provides that after the Secretary and the local organization have agreed on a plan for works of improvement and the Secretary has determined that the benefits exceed the costs, and all requirements of section 4 have been met, the Secretary may participate in carrying out the plan but may not, himself, engage in the construction of any structure on non-Federal land unless no authorized State agency exists, and in no event after July 1, 1956. In rendering assistance the Secretary should, insofar as practicable and feasible, utilize the authority of this Act.

The Secretary shall transmit the plan to the Congress through the President at least 45 days during any regular or special sessions of the Congress before operations thereunder are begun. Plans which involve reclamation or irrigation works or which affect lands under the jurisdiction of the Department of the Interior or which include floodwater detention structures shall be submitted to the Secretary of the Interior or the Army, respectively, for his views at least 60 days prior to transmission to Congress. Any such views shall accompany the plan when transmitted. Federal participation in works of improvement may not begin until the President has issued such regulations as he deems necessary to carry out the purposes of the Act and assure coordination of the work of all the agencies concerned.

Section 6 gives the Secretary authority to cooperate with Federal, State and local agencies to make surveys of watersheds as a basis for the development of coordinated programs. The Secretary of the Interior is authorized to cooperate with the Secretary of Agriculture in planning and developing programs affecting lands under Interior jurisdiction.

Section 7 repeals the provisions of the Flood Control Act of 1936 applicable to the Department of Agriculture, except that it retains authority in the Secretary to carry on projects authorized by the act of December 22, 1944, and to undertake emergency flood control measures under section 7 of the act of June 28, 1938, as amended by section 211 of the act of May 17, 1950.

Section 8 authorizes appropriation of necessary sums, such sums to remain available until expended.

Section 9 provides a short title to the Act.

SECTION 27

IMMEDIATE RELEASE

December 18, 1954

James C. Hagerty, Press Secretary to the President

THE WHITE HOUSE

The President today issued an Executive Order prescribing rules and regulations for the administration of the Watershed Protection and Flood Prevention Act of 1954.

The Act authorizes the Department of Agriculture to render technical and financial assistance to organized groups of farmers living in small watersheds where floods, drought, and soil erosion are inflicting serious damage. Local initiative and responsibility, and close cooperation with State agencies, are key ingredients in carrying out the works of improvement made possible by this law.

Principally, the President, by today's order:

1. Defined the types of programs and works of improvement subject to the order.
2. Assigned responsibility to the Secretary of Agriculture for several functions, including the approval of applications for assistance, the notification of other agencies of survey activities, the clearance of final plans, and the establishment of proper economic and engineering standards for the design and evaluation of projects authorized under the Act.
3. Established a procedure whereby the Secretary of the Interior can cooperate with the Secretary of Agriculture in the installation of works of improvement on lands under the jurisdiction of the Department of the Interior.
4. Established a coordination procedure covering related works carried out by the Departments of the Army and the Interior.
5. Established a general requirement that works under the Act fit in with the comprehensive development of river basins.
6. Defined the role of such agencies as the Weather Bureau and the U. S. Geological Survey, who will assist the Department of Agriculture in the collection and interpretation of basic data on rainfall, runoff, and streamflow.

The issuance of this order constitutes an important step toward the achievement of a sound national program for the development, use, and conservation of the nation's soil and water resources.

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IMMEDIATE RELEASE

December 18, 1954

JAMES C. HAGERTY, PRESS SECRETARY TO THE PRESIDENT

THE WHITE HOUSE

EXECUTIVE ORDER

10584

PRESCRIBING RULES AND REGULATIONS
RELATING TO THE ADMINISTRATION OF
THE WATERSHED PROTECTION AND FLOOD
PREVENTION ACT

By virtue of the authority vested in me by the Watershed Protection and Flood Prevention Act, and as President of the United States, I hereby prescribe the following rules and regulations relating to the administration of the said Act:

Section 1. Scope of order. This order shall apply (a) to the planning, construction, operation, and maintenance of all works of improvement under the authority of the Watershed Protection and Flood Prevention Act (Public Law 566, approved August 4, 1954; 68 Stat. 666), hereinafter referred to as the Act, and (b) to other programs and projects of the Department of Agriculture, and to programs and projects of the Department of the Interior and of the Department of the Army, to the extent that such programs or projects affect, or are affected significantly by, works of improvement provided for in the Act.

Section 2. Department of Agriculture. The Secretary of Agriculture shall have the following-described responsibilities with respect to works of improvement under the Act:

(a) Approval or disapproval of applications for Federal assistance in preparing plans for works of improvement, and the assignment of priorities for the provision of such assistance.

(b) Notifying the following, severally, in writing of all approvals or disapprovals of applications for planning assistance: the sponsoring organization, the State Governor or Governors concerned, the Secretary of the Interior, the Secretary of the Army, and other Federal agencies concerned.

(c) Notifying in writing the Secretary of the Interior and the Secretary of the Army and other Federal agencies concerned of his decision to initiate any survey or field investigation involving water-resource development work, and furnishing the Federal agencies concerned with appropriate information regarding the scope, nature, status, and results of such survey or investigation.

(d) Submitting plans for works of improvement to the State Governor or Governors concerned and to the Federal agencies concerned for review and comment, when the Secretary and the interested local organization have agreed on such plans; and, when and as required by the Act, submitting such plans to the Secretary of the Interior and the Secretary of the Army for their review and comment prior to transmission of the plans to the Congress through the President.

(e) Establishing criteria for the formulation and justification of plans for works of improvement and criteria for the sharing of the cost of both structural and land treatment measures which conform with policies established by or at the direction of the President for watershed protection, flood control, irrigation, drainage, water supply, and related water-resource development purposes.

(f) Establishing engineering and economic standards and objectives, including standards as to degrees of flood protection, for works of improvement planned and carried out under the authority of the Act.

(g) Determination and definition of (1) those land-treatment measures and structural improvements for flood prevention and measures for the agricultural phases of conservation, development, use, and disposal of water which are eligible for Federal assistance, and (2) the nature and extent of such assistance and the conditions under which such assistance shall be rendered.

(h) Planning and installing works of improvement on public lands under his jurisdiction, and arranging for the participation of other Federal agencies in the planning and installation of works of improvement on public lands under their jurisdiction.

(i) Consulting with the Tennessee Valley Authority with respect to any survey or field investigation involving water-resource development work in the Tennessee Valley, and continuing such consultation throughout all phases of project development.

(j) Holding public hearings at suitable times and places when he determines that such action will further the purposes of the Act.

Section 3. Department of the Interior. (a) The Secretary of the Interior shall notify the Secretary of Agriculture and the Secretary of the Army and other Federal agencies concerned in writing of his decision to initiate any survey or field investigation involving water-resource development work, and shall furnish the Federal agencies concerned with appropriate information regarding the scope, nature, status, and results of such survey or investigation.

(b) The Secretary of the Interior shall cooperate with the Secretary of Agriculture in assessing the need for works of improvement under the Act on Federal lands under the jurisdiction of the Department of the Interior. Recommendations of the Secretary of the Interior for

necessary work on such lands shall be submitted as an integral part of the plans of the Department of Agriculture for works of improvement. Arrangements for construction, operation, and maintenance of works of improvement on such lands shall be mutually satisfactory to the Secretary of Agriculture and the Secretary of the Interior.

Section 4. Department of the Army. The Secretary of the Army shall notify the Secretary of Agriculture and the Secretary of the Interior and other Federal agencies concerned in writing of his decision to initiate any survey or field investigation involving water-resource development work, and shall furnish the Federal agencies concerned with appropriate information regarding the scope, nature, status, and results of such survey or investigation.

Section 5. Relationship to comprehensive development. (a) The Secretary of Agriculture shall submit plans for installation of works of improvement under the Act to the Congress through the President only if the Secretary is satisfied that such works constitute needed and harmonious elements in the comprehensive development of the river sub-basin or river basin involved.

(b) Federal agencies having responsibilities for water resource developments shall, in the design and justification of works of improvement, take cognizance of all upstream and downstream works in place and in operation, or soon to be brought into operation. The guiding principle shall be to adjust the nature, capacity, and operating characteristics of works of improvement in a manner that (1) reflects the respective contributions of upstream and downstream works to flood protection and to the conservation, development, use, and disposal of water, and (2) provides the best use and control of water resources at minimum cost. Whenever approximately equivalent benefits can be obtained from alternative works of improvement, or combinations of improvements, with approximately the same cost, the alternative or combination least costly to the Federal Government shall be given preferential consideration. In case benefits are produced jointly by more than one work of improvement, or in case complementary relationships exist between the projects and plans of the several agencies, the benefits claimed in justification of a system of improvements shall not include any duplication or compounding of benefits.

Section 6. Basic data. In the utilization of existing basic physical and economic data, and in the acquisition of additional basic data required for planning, design, construction, operation and evaluation of works of improvement authorized under the Act, the Department of Agriculture shall be assisted by the principal basic-data collection agencies, including the Geological Survey in the Department of the Interior and the Weather Bureau in the Department of Commerce. The basic-data collection agencies shall assist and cooperate with the Department of Agriculture with respect to the following:

(a) Provision of pertinent information in the preliminary planning of works of improvement.

(b) Collaboration in planning programs of hydrologic-data collection in project areas, in the selection of station sites and installation of equipment for collecting hydrologic data, and in the collection of such data.

(c) Collaboration in the analysis and interpretation of hydrologic data collected specifically for projects initiated under the Act, and of relevant data which may contribute to an analysis of the effects of such projects.

DWIGHT D. EISENHOWER

THE WHITE HOUSE

December 18, 1954

SECTION 28

POLICY OF THE SECRETARY OF AGRICULTURE FOR THE ADMINISTRATION
OF THE WATERSHED PROTECTION AND FLOOD PREVENTION ACT
(PUBLIC LAW 566 - 83d CONGRESS - 68 STAT. 666)

The Administrator of the Soil Conservation Service hereby is assigned responsibility for the administration of The Watershed Protection and Flood Prevention Act (Public Law 566 - 83d Congress - 68 Stat. 666). He shall discharge this responsibility:

- (1) Subject to the general guidance and supervision of the Assistant Secretary of Agriculture for Federal-States Relations;
- (2) with careful regard for the language of the statute and the provisions of the Regulations of the President (Executive Order 10584) applicable to it;
- (3) in accordance with the provisions of Title 9 of the Administrative Regulations of the Department of Agriculture; and
- (4) in harmony with the policies herein set forth.

The initiative for all projects under this legislation must come from the people of the locality where the proposed project is to be carried out.

The development of maximum initiative and responsibility by local organizations shall be given every appropriate encouragement. Because work to be undertaken pursuant to this Act has significance only as it relates to the present and future needs of people, careful attention in all cases will be given to the probable effect of any proposed watershed program upon the people to be affected by it.

Work undertaken and performed under this Act is to be to the fullest possible extent in harmony with other work of this Department, of other Departments of the Federal Government, and with work of State and local governments and private organizations, undertaken and performed for watershed protection and flood prevention.

Work undertaken under this Act is to be cooperative with the States, their political subdivisions, or any agency having authority under State law to carry out, maintain, and operate works of improvement authorized by the Act. Cooperative work will be undertaken so as to assure compliance with State laws, and to achieve as fully as possible a coordinated effort toward accomplishing the objective of this Act.

In preparation and execution of plans for works of improvement, fullest utilization is to be made of all available basic data pertinent to such

improvements including geodetic, climatic, hydrologic, topographic, geologic, soils, land use and vegetal cover conditions. Such data will be utilized where applicable from whatever source it is available.

Assistance rendered under the Act will, among other things, be provided on the basis of its contribution toward an adequate water supply for our people, prevention of water waste, reduction of pollution, equitable distribution of available water supplies, prevention of floodwater and sediment damages, diminution of destructive force of water, and its contribution toward an enhancement of resources values in terms of wise use of resources to meet the needs of an expanding economy.

Water laws of the various States and all of the rights of any landowner, appropriator, or user of water from any source shall be fully honored in all respects as they may be affected by activities conducted under this Act.

Works of improvement should be based on sound economic analysis. Costs shall be less than assured and identifiable benefits. Benefits are to be assessed with care and are to be clearly creditable to the improvement. Intangible benefits not subject to evaluation should not be used for economic justification. They may appropriately be used as argument but not as a part of economic analysis.

Works of improvement including land-treatment measures, structural measures, and such other water-management measures as may be needed for the flood prevention or the agricultural phases of the conservation, development, utilization, and disposal of water will be planned for all lands within a watershed regardless of their ownership.

The Administrator will establish criteria for and assign on a national basis priorities for the furnishing of assistance under the terms of this Act to local organizations. In establishing such criteria and assigning such priorities he shall take cognizance of the work of other organizations public and private in the area of watershed protection and flood prevention. Work undertaken under this Act shall be planned to be harmonious with the objectives of local interests including being in harmony with existing projects or those soon to be brought into operation through other public or private organizations.

On privately-owned lands, financial assistance will be provided only for works of improvement producing direct measurable benefits to groups of landowners, to communities, and to the general public.

Federal assistance to be provided under this Act for land-treatment measures on land not in Federal ownership shall be limited to technical assistance required to complete the planning and application of such measures during the scheduled period for completion of the project supplemental to other program activities.

It is the policy of the Department that there shall be the fullest possible cooperation with local, State and other Federal agencies which have or which may undertake responsibilities in the field of land and water management to the end that there may be a coordinated effort toward accomplishing the objectives of this Act.

All appropriate agencies of the Department of Agriculture, and it is expected all State agencies, will make available to local organizations to the fullest practicable extent and commensurate with their regular responsibilities such technical assistance and information necessary to development of work plans, installation of works of improvement, and application of land-treatment measures.

Prior to receiving Federal assistance in the installation of works of improvement on non-Federal land, the local organization will:

- (1) Provide assurance that it will pay its proportionate share of the cost of installing the works of improvement as shown in the work plan;
- (2) furnish documentary evidence that arrangements have been made to assure the adequate operation and maintenance of such works;
- (3) acquire or provide evidence that landowners have acquired in accordance with any applicable State laws such water rights as are needed in the installation and operation of works of improvement;
- (4) provide assurance that structural works of improvement will be installed, operated, and maintained in accordance with any applicable State laws;
- (5) provide for informing landowners and others participating in the plan and its effectuation of their responsibilities for compliance with State and Federal laws applicable; and
- (6) provide documentary evidence of acquisition of necessary land, easements, and rights-of-way necessary to the installation of proposed works of improvement.

On Federal lands the land-treatment measures for flood prevention will be installed, operated, and maintained by the agency administering such land. Funds available under the authority of this Act will be used to install land-treatment measures on Federal lands only to the extent necessary to complete the application of such needed measures provided for in approved work plans during the scheduled period for completion of the project.

The cost of installing, operating, and maintaining other works of improvement on Federal land will be shared by the agency administering such land and the local organization in proportion to the estimated benefits that will accrue to Federal and non-Federal land and in accordance with the criteria hereinafter stated.

After the installation period, the operations and maintenance of improvements, including the cost of management, shall

- (1) on private lands be a responsibility of the local organization, and
- (2) on public lands be a responsibility of the public agency responsible for the management of such land using funds available under authorities other than this Act.

Under the Act the local organization will assume all construction costs for providing storage in any structure for purposes other than flood prevention and features related thereto. It is the policy that local organizations will be expected to assume that part of the cost of installing works of improvement, exclusive of Federal costs of technical services such as planning, design, supervision, and economic analysis, which is equal to the ratio of local benefits to total benefits and all construction costs for water distribution and other facilities for purposes other than flood prevention and features related thereto. In addition to such costs as accrue to the Federal Government under the above provisions, the Federal Government may share a portion of the costs otherwise accruing to the local organization when justified in the work plan and the reasons for so doing are set forth in detail. Criteria and procedures for justifying inclusion of such cost shall be established by the Administrator and approved by the Assistant Secretary.

In accordance with the stipulations and policies herein set forth, the Administrator of the Soil Conservation Service will establish procedures for receiving and approving applications for assistance, determine and define measures eligible for assistance under the Act; establish standards for work plan development, program justification and cost sharing; assign planning priorities on a national basis; inform and cooperate with other Federal agencies in providing authorized Federal assistance; cooperate with designated State agencies or Governors in carrying out their responsibilities; assist local organizations in planning and carrying out works of improvement; prescribing such regulations as may be required for operation and maintenance by local organizations; and do all other things necessary to carrying out the provisions of this Act.

March 14, 1955

Date

/s/ E. T. Benson

Secretary

SECTION 29

USDA ADMINISTRATIVE REGULATIONS AND RELATED MEMORANDA

The following material contains the provisions of Title 9, Administrative Regulations, USDA, as of November 24, 1954, relating to the responsibilities of the Forest Service and the Soil Conservation Service with respect to Flood Prevention and related programs.

FOREST SERVICE

ASSIGNMENT OF FUNCTIONS. The following assignment of functions is hereby made to the Forest Service:

- a. Over-all leadership in forest and forest range conservation, development, and utilization. (As used here and elsewhere in this Title the term "forest" includes woodlands, and brush covered wildlands in mountainous areas.)
- b. The protection, management and administration of the national forests and lands acquired for or being administered in connection with national forest purposes.
- c. The following research programs: forest management; range management on forest ranges and adjacent, integrated non-forest lands; forest fire control; forest production and utilization; watershed protection and other forest and forest range influences; and forest resources and economics.
- d. The programs of cooperation in the protection, development, conservation, management and utilization of forest resources, except as otherwise assigned in this Title.
- e. Forest disease and pest research, control, and eradication.
- f. Programs under Section 23 of the Federal Highway Act (23 U.S.C. 23, 23a).
- g. Naval stores conservation program authorized by sections 7-17 of the Soil Conservation and Domestic Allotment Act (16 U.S.C. 590g-590q).
- h. The protection, management and administration under Title III of the Bankhead-Jones Farm Tenant Act (7 U.S.C. 1010-1012), of lands under the administration of this Department including the custodianship of lands under lease to States and local agencies, except as otherwise assigned in 9 AR 400e.
- i. The responsibility, under such general principles, criteria and procedures as may be established by the Soil Conservation Service, for making preliminary examinations and surveys under the flood prevention program (Flood Control Act of 1936 as amended and supplemented), for conducting surveys and investigations under the small watershed protection program (item for Watershed Protection

4/19/55

in the Department of Agriculture Appropriation Act, 1954), for making surveys, investigations and studies under the program for flood prevention and agricultural phases of the conservation, development, utilization, and disposal of water (Watershed Protection and Flood Prevention Act), and for the collection of data necessary to the preparation of comprehensive river basin reports in the watershed or basin for the following: all national forests and other lands administered by the Forest Service; range lands within national forest boundaries and range lands adjacent to national forests which are administered in conjunction with such forest under formal agreement with the owner or lessee; and other forest lands except that the determination as to what lands are to be in forest or woodlands shall be the responsibility of the Soil Conservation Service.

- j. The responsibility for installing flood prevention and watershed protection works of improvement on all national forests and other lands administered by the Forest Service; range lands within national forest boundaries and range lands adjacent to national forests which are administered in conjunction with such forests under formal agreement with the owner or lessee; and, with respect to other forest lands in the watershed or basin, in cooperation with state and local agencies, for installing all fire protection measures provided for in approved work plans, and, for providing tree planting stock and furnishing technical assistance in forest management.

RESERVATIONS TO THE SECRETARY

- (1) The authority to issue rules and regulations relating to the national forests and other lands administered for national forest purposes, to lands administered under Title III of the Bankhead-Jones Farm Tenant Act, and to the programs under Section 23 of the Federal Highway Act.
- (2) The authority as a member of the National Forest Reservation Commission. (16 U.S.C. 513).
- (3) The making of recommendations to the President with respect to the transfer of lands pursuant to the provisions of subsection (c) of section 32 of Title III of the Bankhead-Jones Farm Tenant Act (7 U.S.C. 1011(a)).
- (4) The making of recommendations to the President for the establishing of national forests or parts thereof under the provisions of section 9 of the Act of June 7, 1924 (43 Stat. 655).
- (5) Final approval of regulations under section 4 of the Soil Conservation and Domestic Allotment Act (16 U.S.C. 590d) relating to naval stores.
- (6) Final approval and submission to the Congress of the results of preliminary examinations and survey reports under the Flood Control Act of 1936, as amended and supplemented.
- (7) Approval of requests for apportionment of reserves under the Forest Pest Control Act.

- (8) Approval of claims in excess of \$1,000.00 under the act of January 31, 1931, (16 U.S.C. 502) providing reimbursement to owners for loss, damage, or destruction of horses, vehicles, and other equipment.

SOIL CONSERVATION SERVICE

ASSIGNMENT OF FUNCTIONS. The following assignment of functions is hereby made to the Soil Conservation Service:

- a. The responsibility of acting as the technical service agency in the field of soil and water conservation and flood prevention.
- b. Administration of the programs for soil and water conservation, including the Act of April 27, 1935 (16 U.S.C. 590a-f), except as otherwise assigned, and the national soil survey.
- c. General responsibility for administration of the flood prevention program (Flood Control Act of 1936, as amended and supplemented), the small watershed protection program (item for watershed protection in the Department of Agriculture Appropriation Act, 1954) the program for flood prevention and agricultural phases of the conservation, development, utilization, and disposal of water (Watershed Protection and Flood Prevention Act) and activities in connection with river basin investigations and preparation of reports thereon (with due recognition to the responsibilities otherwise assigned):
 1. Development of general principles, criteria and procedures for these programs.
 2. Making preliminary examinations, surveys, investigations, watershed work plans and installing flood prevention and watershed protection works of improvement or providing to local interests such technical and other assistance as may be needed for installing such works of improvement in accordance with approved watershed work plans; except for those responsibilities assigned to the Forest Service under items i and j above.
- c. Administration of the acts relating to Water Conservation and Utilization Projects, except servicing and collection of accounts and management and disposition of reserved mineral interests.
- e. The use, administration and disposition under Title III of the Bankhead-Jones Farm Tenant Act (7 U.S.C. 1010-1012) and the related provisions of Title IV thereof of the nursery projects designated and described in Executive Order 10516 of January 26, 1954 (19 F.R. 467), and the Brooksville Nursery in Hernando County, Florida, containing 847 acres.

RESERVATIONS TO THE SECRETARY

- (1) The execution of memoranda of understanding establishing the general basis for cooperation by the Department with Soil Conservation Districts, wind erosion districts, and other districts organized for the conservation and utilization of soil and water resources within the several States, territories and possessions.
- (2) Final approval and submission to the Congress of the results of preliminary examinations and survey reports under the Flood Control Act of 1936 as amended and supplemented, and of comprehensive river basin reports.

UNITED STATES DEPARTMENT OF AGRICULTURE
Washington 25, D. C.

To: State Conservationists, SCS
Regional Foresters, FS

From: D. A. Williams, Administrator, SCS
Richard E. McArdle, Chief, FS

Subject: Responsibilities on Brush, Forest and Range Lands, Not Administered by the Forest Service, including Those Under Chapters 3 and 4, Amendment No. 4, Title 9 of the Department of Agriculture Administrative Regulations

In carrying out the responsibilities of the Forest Service and the Soil Conservation Service in the Department's flood prevention, conservation and watershed protection programs and river basin investigations, the following interpretations of the above administrative regulations have been mutually agreed upon and will be used as a guide in field operations.

Paragraph 300 a. (For purpose of Paragraphs d., i., and j.)
"Brush-covered wild lands in mountainous areas" will be defined as follows:

Chaparral or brushland in mountainous areas which support heavily branched dwarf trees or shrubs, the crown canopy of which covers more than 40 percent of the ground, has no significant timber or grazing values, and is primarily valuable for watershed protection. The more common constituents are species of oak, mountain mahogany, buckthorn, ceanothus, manzanita, chamise, and sumac.

Paragraphs 300 d. and 400 b. "Forestry assistance to landowners."

Basic to this joint understanding is a recognition of (1) the landowner's varying degrees of interest in his forest crop; (2) his responsibility for his own land; (3) the fact that landowners normally apply needed conservation practices progressively; and (4) the fact that privately-owned forest land is commonly associated with other kinds of land and therefore the uses of all land of the individual owners must be integrated.

1. Cooperative Responsibilities for Forestry Assistance to Landowners. The Soil Conservation Service and the Forest Service will use their available resources to:

(1) Assist state, county, and local units of government as well as conservation organizations, associations, private industry, consulting foresters and other interested persons in helping landowners improve their woodland conservation practices.

(2) Encourage state colleges, experiment stations, and extension services to contribute to the improved application of woodland conservation practices by landowners.

(3) Continually appraise the opportunity for improving techniques by which landowners may improve their woodland management.

(4) Adapt technical forestry data to procedures for landowner application.

(5) Make joint review annually of the scope of activities and the technical standards of the SCS and the Forest Service in providing forestry assistance to landowners in soil conservation districts. Such reviews will be conducted by SCS and FS according to a plan to be approved by the Chief of the Forest Service and the Administrator, SCS.

In discharging their cooperative and separate responsibilities, the Soil Conservation Service and the Forest Service recognize the legal responsibilities of the State Forester in forestry in his state. It is the desire of the Soil Conservation Service and the Forest Service to actively collaborate with the State Forester in the development and execution of woodland conservation programs.

2. SCS Responsibilities for Forestry Assistance to Landowners:

The Soil Conservation Service woodland conservationists will train and assist farm and ranch planners to help landowners develop a soil, water and plant conservation plan for all land diverted to trees and for the existing woodlands. In those localities where farm foresters from the state are not available the Soil Conservation Service woodland conservationists will help landowners plan and apply woodland conservation practices.

The Soil Conservation Service recognizes the Forest Service as the subject matter specialist in forestry for the Department of Agriculture and therefore expects the Forest Service to take final responsibility for the technical adequacy of the forestry phases of the Department's woodland conservation program. Within this framework the Soil Conservation Service will provide necessary technical standards, guidance and training to farm and ranch planners in their woodland planning and application assistance to landowners.

3. Forest Service Responsibilities for Forestry Assistance to Landowners.

As the subject matter specialist in forestry for the Department, the Forest Service has final responsibility for the technical adequacy of the forestry techniques used by all U. S. Department of Agriculture employees.

The Forest Service will help the states through the cooperative forestry programs to provide farms--wherever possible giving high priority to farms that already have soil conservation district plans--with all types of forestry assistance, including protection (C-M 2), planting stock (C-M 4), and technical assistance (CFM). In those localities where this assistance is not yet available, the Forest Service will urge the states to provide it. To the fullest possible extent, the forestry practices recommended will be fitted to the over-all farm plan developed by the landowner in cooperation with the soil conservation district.

Paragraph 300 i and j. "Formal agreements."

The four types of formal agreements between the Forest Service and landholders referred to in paragraph 300 i and j, Amendment No. 4 of Title 9 of the Administrative Regulations are as follows:

1. "On and off permits." This type of permit is used where a natural range unit consists in part of federally-owned land under the jurisdiction of the Forest Service, and in part of privately-owned land adjacent to the national forest. Such permits are used (1) when desirable to facilitate administration of national forest ranges, or (2) where a substantial part of the grazing capacity is controlled by the private landowner and he is unwilling to waive the use of his lands to the government.

2. "Private land permits." This type of permit is issued to persons who own or control rangelands, either within or adjacent to national forests and who have waived the use of such lands in exchange for equal use privileges either upon such lands or lands administered by the Forest Service. Private land permits are usually for small, scattered parcels which would be impracticable to fence and use separately from national forest land.

3. "Cooperative agreements." Such agreements provide for administration by the Forest Service of extensive acreages of privately-owned land (usually owned by railroads, lumber companies, or other corporations) which occur in checkerboard pattern or solid blocks, within or adjacent to the national forest. Such agreements are entered into by the regional forester where they are in the interests of the federal government to protect watershed values or facilitate administration of federal lands.

4. "Granger-Thye Act agreements." Such agreements provide for the leasing, seeding, and fencing of privately-owned rangeland intermingled with or adjacent to national forest or other land administered by the Forest Service. Such agreements are made for a term of years up to 20 with option to renew and must have approval of the Chief of the Forest Service prior to the execution of the agreement by the regional foresters.

The lands involved under these four types of agreements will be shown on a suitable map for those areas within the boundaries of the designated small watersheds, and for such soil conservation districts as adjoin or encompass all or part of a national forest. As additional watersheds are designated or new districts organized, similar map records will be prepared and made available to the state conservationist. In the event new agreements are made or old agreements cancelled in any area for which map records have been prepared, the regional forester will provide the state conservationist with corrected information.

Delegation of Agency Responsibilities

Amendment No. 4 of Title 9 of the Administrative Regulations was intended to clearly assign certain of the Department's functions in flood prevention and related programs to the Soil Conservation Service and Forest Service, respectively. Where necessary to expedite the performance of such functions either the Forest Service or the Soil Conservation Service may delegate its authority to the other agency, upon approval of the Chief of the Forest Service and Administrator of the Soil Conservation Service.

9/2/54

Date

/s/ D. A. Williams

D. A. Williams

Administrator, SCS

9/7/54

Date

/s/ Richard E. McArdle

Richard E. McArdle

Chief, FS

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington 25, D. C.

November 8, 1954

TO: Regional Foresters, FS
State and Territorial Conservationists, SCS

FROM: Warren T. Murphy, Chief, Division of Flood Prevention,
River Basin Program, FS
Carl B. Brown, Director, Planning Division, SCS

SUBJECT: Intra-Departmental Coordination of Hydrologic Phases of
Watershed Planning under Public Law 566

Recently you received copies of a joint memorandum addressed to State Conservationists and Regional Foresters from the Administrator of the Soil Conservation Service and the Chief of the Forest Service, signed September 2 and 7, 1954, respectively. This memorandum sets forth responsibilities which were mutually agreed upon in connection with Chapters 3 and 4, Amendment No. 4, Title 9 of the U.S. Department of Agriculture Administrative Regulations. We have further agreed upon the following details to facilitate working arrangements in carrying out the hydrologic phases of watershed planning:

1. Soil Conservation Service hydrologists will be responsible for the overall hydrologic study of the watershed.
2. Forest Service hydrologists will determine the present and future hydrologic conditions on those lands for which the Forest Service has responsibility.
3. In developing the total hydrograph for a watershed, the Soil Conservation Service hydrologists and Forest Service hydrologists will jointly appraise the relative runoff contribution from lands for which the Forest Service has responsibility.

It is believed that the above arrangements will provide an effective basis for developing a sound watershed program.

/s/ Carl B. Brown

/s/ Warren T. Murphy

STC (SCS) 5 Copies
E&WP Units (SCS) 5 Copies
WD (SCS) 1 Copy

MEMORANDA OF AGREEMENT BETWEEN THE SOIL CONSERVATION SERVICE,
AGRICULTURAL RESEARCH SERVICE, GEOLOGICAL SURVEY, FISH AND
WILDLIFE SERVICE, AND WEATHER BUREAU

MEMORANDUM OF AGREEMENT BETWEEN THE SOIL CONSERVATION
SERVICE AND THE AGRICULTURAL RESEARCH SERVICE
RELATING TO SERVICES TO BE FURNISHED BY
THE ARS UNDER THE WATERSHED PROTECTION APPROPRIATION ITEM

To assist in carrying out its responsibilities for work under the Watershed Protection Appropriation Item, the Soil Conservation Service desires to utilize specialized assistance available in the Agricultural Research Service and the two Services therefore mutually agree as follows:

I. Kinds of Work to be Undertaken:

A. Assistance in the Preparation of Departmental Policy Recommendations.

The Agricultural Research Service will provide technical assistance to the Soil Conservation Service, upon request, as provided for under Section II of this agreement, in the preparation of recommendations to the Department for the development of the Nation's land and water resources and assist it in the formulation and adaptation of principles, policies, criteria and procedural guides for administering the Watershed Protection and Flood Prevention Act.

B. Assistance in economic evaluation of plans for works of improvement.

When requested by the Soil Conservation Service, the Agricultural Research Service will work cooperatively with personnel of the Soil Conservation Service and cooperating State and local agencies in the furtherance of work plan development and the determination of the economic justification of proposed works of improvement as required by the Watershed Protection and Flood Prevention Act. The application of the general principles and criteria of program formulation and evaluation contained in statements of policy issued by the Department and by the Bureau of the Budget often present difficult problems under field conditions. Assistance by Agricultural Research Service staff members will be provided in developing practical procedures for local application of the economic principles and criteria involved.

The Agricultural Research Service will assist in making determinations such as the following: (1) need for added products or services which would be provided by the works of improvement; (2) appraisal of watershed damages; (3) appraisal of expected benefits; (4) appraisal of economic costs of works of improvement and allocation to project purposes when necessary; and (5) development of scale of project in accordance with established criteria of economic feasibility.

C. Assistance in measuring the economic results of pilot watershed protection project.

In connection with the physical and economic evaluation of watershed protection projects, the Agricultural Research Service will, upon request of the Soil Conservation Service, assist in two types of evaluation studies: (1) detailed evaluation studies of pilot watershed protection projects selected for intensive evaluations; and (2) generalized benefit-cost estimates in the remaining pilot watershed protection projects.

Scope and Objective of Studies. The sample evaluation work plan issued April 20, 1954, by the Soil Conservation Service provides primarily for the standardization of objectives, presentation of information, and cooperative arrangements for watershed projects selected for intensive evaluation. The broad objective of project evaluation is to appraise the effects of a watershed protection program in both physical and economic terms. The evaluation is intended to determine the economic benefits realized from the watershed program.

Area of Studies. Studies will be made in all pilot watersheds selected for intensive evaluation. Studies in the other pilot watersheds will be undertaken as required to balance out the major types of evaluation problems for certain factors under measurement. The Agricultural Research Service will, upon request of the Soil Conservation Service, assist in the less intensive evaluations where special problems are involved.

General Procedure of Economic Investigation. The procedures for making various economic measurements and analysis will be worked out cooperatively in accordance with the annual work plan, taking into consideration policies, procedures, and techniques established for carrying out the program. The Agricultural Research Service will assist the Soil Conservation Service in the development of schedules, selection of samples and in the collection of data required for this evaluation. Determinations or measurements such as the following may be required:

1. Selection of those practices and measures for which full appraisal is desired.
2. Map and locate selected measures and practices; "A" measures by specific site.
3. For those measures and practices having off-site effects, determine the limits of their zone of

influence. Account will be taken of interrelations of measures and practices in the analyses of programs.

4. At appropriate intervals of time (varying according to the measure being appraised and frequency of damage) economic effects of the measures and practices will be observed and appraised. Arrangements will be made with selected farmers to maintain records of certain types of information. The appraisal will be based on changes in: (a) land use, yield and quality of product; (b) inundation damage; (c) damage from deposition; (d) damage from scour; (e) damage from gullying; and (f) production costs.
5. Special observations may be required for appraising damages such as (a) sedimentation of lakes, ponds, reservoirs, harbors, and other waterways, and (b) flood damages outside the watershed in cases where such losses may be reduced by the program being studied.
6. At appropriate intervals of time, appraise the performance of local sponsoring organizations, record the cash and other contributions they make, and analyze the factors affecting their ability to carry out their responsibilities in watershed programs.
7. Allocation of off-site effects to the installed measures or practices or combinations thereof.

D. Assistance on special economic evaluations problems.

Work of a specialized and detailed nature will be undertaken when it is mutually decided that such work will contribute to the successful establishment of the program.

The nature and scope of such studies will be agreed upon between the Soil Conservation Service and Agricultural Research Service. Such studies as the following may be included: (a) development of economic techniques and methods for use in work plan preparation, (b) special problems encountered in particular areas or associated with particular measures, (c) problems associated with obtaining local participation and cooperation, (d) analysis of experience in dealing with problems encountered by local organizations in meeting their responsibilities in program operations, and (e) assembly of basic economic data essential for project formulation and justification.

E. Assistance in review and analysis of the economic aspects of resource development proposals.

In accordance with procedures of the Inter-Agency Committee on Water Resources, the Department reviews reports on resource development proposals prepared by other Federal agencies and participates in developing Federal policy relating to the preparation of such proposals. Under this arrangement the Agricultural Research Service, at the request of the Soil Conservation Service, reviews and analyzes the economic aspects of proposed land and water resource projects and programs of other Federal agencies. It also participates with other Federal agencies in developing uniform national evaluation criteria.

The Agricultural Research Service will continue to provide such assistance as is requested in the field of economics relating to Inter-Agency affairs. The ultimate aim of this cooperative effort will be to unify and improve procedures and evaluation practices by the several Federal agencies interested in land and water resource conservation and development programs.

II. Procedure for selection of specific work assignments:

Within the limits of this agreement and the amount of funds transferred, a general plan will be prepared by the Soil Conservation Service and the Agricultural Research Service covering the work to be undertaken each year. This annual plan will include a list of the principal problems on which assistance is needed, procedures to be followed, cooperation to be developed with other Federal, State and local agencies, and a schedule of reports to be prepared. The work plan will indicate the Agricultural Research Service personnel available for assistance to the Soil Conservation Service as indicated under Part I, and the approximate time that can be allocated to such work by each staff member so assigned. Mutually acceptable adjustments in this annual working schedule will be made as necessary.

III. Agricultural Research Service cooperation with Federal, State and local agencies:

In carrying out field investigational work covered by this agreement, the Agricultural Research Service will cooperate with Federal, State and local agencies, including State colleges and regional groups, in accordance with the provisions of the annual work plan.

IV. Issuance of reports:

Reports will be issued as mutually agreed upon and after approval by all cooperating agencies, through established channels of the Soil Conservation Service, Agricultural Research Service, or cooperating agencies.

V. Transfer of funds:

It is agreed that Soil Conservation Service will annually transfer funds to the Agricultural Research Service for credit to a working fund account to be established from funds included under the Watershed Protection appropriation item for such plan of work as may be mutually agreed to under the provisions of Section II. It is mutually agreed that \$30,000 will be transferred to the Agricultural Research Service in the fiscal year 1955 and \$100,000 in the fiscal year 1956, and additional amounts for subsequent fiscal years, all annual amounts to be subject to mutual agreement on a plan of work as provided for in Section II and to the availability of funds therefor.

VI. Progress reports:

The Agricultural Research Service will make an annual report to the Soil Conservation Service on accomplishments under the work plan provided for in Section II, and will include a report on expenditures for each of the principal types of work outlined therein. Other reports will be made upon request.

VII. This Memorandum of Agreement shall become effective as of date of approval and shall continue in effect until modified by mutual agreement or until terminated by either party by giving not less than 60 days' notice in writing to the other party.

1/24/55

Date

/s/ D. A. WilliamsD. A. Williams, Administrator
Soil Conservation Service1/27/55

Date

/s/ B. T. ShawB. T. Shaw, Administrator
Agricultural Research Service

Approved:

3/10/55

Date

/s/ E. L. Peterson

Assistant Secretary

MEMORANDUM OF AGREEMENT
BETWEEN THE
SOIL CONSERVATION SERVICE AND THE WEATHER BUREAU
RELATING TO
COOPERATIVE WORK IN THE WATERSHED PROTECTION
AND FLOOD PREVENTION PROGRAM

Pursuant to discussions between representatives of the Soil Conservation Service and the Weather Bureau relating to the transfer of funds to the Weather Bureau for the purpose of obtaining and supplying certain information needed by the Soil Conservation Service in the performance of its work under the Watershed Protection and Flood Prevention Act, it is agreed that such work will be undertaken in accordance with this memorandum of agreement.

The work contemplated will consist of the compilation of information (in the main from existing records and, in limited cases, from data now being obtained) to be used in planning, installing, operating, and maintaining works of improvement for watersheds on which applications for assistance under the Watershed Protection and Flood Prevention Act have been received by the Soil Conservation Service.

I. Kinds of Work to be Undertaken

- A. The Weather Bureau will obtain information on storm rainfall characteristics that will be needed by the Soil Conservation Service in planning and design activities. The primary needs relate to the characteristics of time and areal distribution of rainfall and the frequencies of various amounts of rainfall in storms of various durations and seasons of occurrence in different regions of the country.
- B. The Weather Bureau will collect basic data on precipitation needed for planning, design, construction, operation, and evaluation of works of improvement authorized under the Act, subsequent to approval of an application for assistance in specific watersheds and limited to completion of project installation. The work will include installation of equipment for obtaining precipitation data and the collection of such data on watersheds selected by the Soil Conservation Service.

II. Procedure for Execution of Cooperative Endeavor

Within the limits as set by the amount of funds available for transfer, or transferred, the Weather Bureau will proceed with the collection, compilation, and analysis of basic precipitation data as are necessary for suitable presentation. Representatives of the Soil Conservation Service and the Weather Bureau, in consultation with a representative of the Agricultural Research Service, will develop mutually agreed-upon procedures and a general plan to cover the work to be undertaken each year.

III. Preparation of Reports

The Weather Bureau will prepare and submit to the Soil Conservation Service twelve copies of manuscript reports upon completion of each independent phase of the work. The Weather Bureau will also submit to the Soil Conservation Service three copies of a brief annual report which will indicate the progress of work during each fiscal year.

IV. Publication of Results

The Weather Bureau will submit to the Soil Conservation Service for review and concurrence any material intended for publication that has been obtained through the use of funds provided for this work.

V. Transfer of Funds

The Soil Conservation Service will advance funds to the Weather Bureau for the cost of personal services and any material, supplies, and facilities provided by the Weather Bureau for the purposes herein stated from appropriations made under the Watershed Protection and Flood Prevention Act. Advances associated with work under paragraph I-A of this Memorandum of Agreement shall not exceed \$15,000 in fiscal year 1955 and \$30,000 in fiscal year 1956. Advance of funds for work under paragraph I-B will be made in amounts to be mutually agreed upon as necessary for the conduct of this program of work. All transfers will be subject to the availability of funds therefor.

VI. Effective Period of Agreement

This Memorandum of Agreement shall become effective when executed, shall continue in effect until June 30, 1956, and may be modified or renewed by agreement of the parties.

SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Dec 15 1954
Date

By: /s/ D. A. Williams
D. A. Williams, Administrator

WEATHER BUREAU
UNITED STATES DEPARTMENT OF COMMERCE

Dec 28 1954
Date

By: /s/ Francis W. Reichelderfer
Francis W. Reichelderfer, Chief

MEMORANDUM OF AGREEMENT
BETWEEN THE
SOIL CONSERVATION SERVICE
AND THE
UNITED STATES GEOLOGICAL SURVEY
RELATING TO
COOPERATIVE WORK IN THE WATERSHED PROTECTION
AND FLOOD PREVENTION PROGRAM

Pursuant to discussions between representatives of the Soil Conservation Service and the United States Geological Survey relating to the transfer of funds to the Geological Survey for the purpose of obtaining and supplying certain information needed by the Soil Conservation Service in the performance of its work under the Watershed Protection and Flood Prevention Act, it is agreed that such work will be undertaken in accordance with this Memorandum of Agreement.

The work contemplated will consist of the compilation of information (in the main from existing records and, in limited cases, from data now being obtained) to be used in planning, installing, operating, and maintaining works of improvement for watersheds on which applications for assistance under the Watershed Protection and Flood Prevention Act have been received by the Soil Conservation Service.

I. Kinds of Work to be Undertaken:

A. Compilation of rainfall and runoff data on selected watersheds

The U. S. Geological Survey will compile rainfall and runoff data on watersheds selected in accordance with criteria established by the Soil Conservation Service. The work will include the development of hydrographs of peak runoff, the tabulation of daily runoff and precipitation, the preparation of isohyetal maps, the determination of flood frequencies, and such other related work agreed to be essential.

B. Collection of basic sedimentation data on selected retarding reservoirs

The U. S. Geological Survey will provide technical personnel and special equipment to measure the sediment outflow from selected retarding reservoirs in order to determine trap efficiency.

Measurements of sediment outflow from selected structures will be made for all storm discharges so that the total annual sediment discharge can be computed. Occasional water and sediment samples of inflow and outflow will be collected for typical storm runoffs to determine the settling velocities of sediment particles in respect to the character of native water.

C. Collection of basic data for works of improvement authorized under the Act

The U. S. Geological Survey will collect basic physical data on runoff and sedimentation needed for planning, design, construction, operation, and evaluation of works of improvement authorized under the Act, subsequent to approval of an application for assistance in specific watersheds and limited to completion of project installation. The work will include installation of equipment for obtaining hydrologic and sedimentation data and the collection of such data on watersheds selected by the Soil Conservation Service.

II. Procedures for Execution of Cooperative Endeavor

Within the limits as set by the amount of funds available for transfer, or transferred, the U. S. Geological Survey will proceed with the work outlined in paragraph I above and the making of such determinations as are necessary for suitable presentation. Representatives of the Soil Conservation Service and the U. S. Geological Survey, in consultation with a representative of the Agricultural Research Service, will develop mutually agreed-upon procedures for the execution of the work.

III. Preparation of Reports

The U. S. Geological Survey will prepare and transmit to the Soil Conservation Service twelve copies of manuscript reports upon completion of each independent phase of the work. The U. S. Geological Survey will also transmit to the Soil Conservation Service three copies of a brief annual report which will indicate the progress of work during each fiscal year.

IV. Publication of Results

Either party may publish results of this work as mutually agreed upon.

V. Transfer of Funds

The Soil Conservation Service will advance funds to the U. S. Geological Survey for the cost of personal services and any material, supplies, and facilities provided by the U. S. Geological Survey for the purposes herein stated from appropriations made under the Watershed Protection and Flood Prevention Act. Advances associated with work under paragraphs I-A and I-B of this Memorandum of Agreement shall not exceed \$20,000 in fiscal year 1955 and \$40,000 in fiscal year 1956. Advance of funds for work under paragraph I-C will be made in amounts to be mutually agreed upon as necessary for the conduct of this program of work. All transfers will be subject to the availability of funds therefor.

VI. Effective Period of Agreement

This Memorandum of Agreement shall become effective when executed, shall continue in effect until June 30, 1956, and may be modified or renewed by written agreement of the parties.

SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Dec 14 1954
Date

By: /s/ D. A. Williams
D. A. Williams, Administrator

GEOLOGICAL SURVEY
UNITED STATES DEPARTMENT OF THE INTERIOR

Dec 29 1954
Date

By: /s/ Thomas S. Nolan, Acting
William E. Wrather, Director

MEMORANDUM OF UNDERSTANDING
BETWEEN
FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR
AND
SOIL CONSERVATION SERVICE, DEPARTMENT OF AGRICULTURE

This memorandum is entered into for the purpose of encouraging the coordination and integration of fish and wildlife conservation with works of improvement carried out pursuant to provisions of the Watershed Protection and Flood Prevention Act of August 4, 1954 (Public Law 566, 83rd Congress, 2nd Session), and to that end will provide guidance to all personnel in the Fish and Wildlife Service and the Soil Conservation Service.

General Considerations

1. The Watershed Protection and Flood Prevention projects may have a significant effect on fish and wildlife resources in some watersheds. Therefore, it is agreed that the Fish and Wildlife Service and the State fish and game agencies may make such recommendations for fish and wildlife conservation as they deem practical during the planning stage of projects under Public Law 566.
2. Local organizations, as defined in Public Law 566, may desire to incorporate measures for enhancement of fish and wildlife in watershed work plans based upon recommendations of State and Federal agencies, but no part of the cost of such enhancement measures will be paid for from appropriations made under authority of Public Law 566.
3. Costs of measures for mitigation of any damages to fish and wildlife resources resulting from the proposed works of improvement under Public Law 566 will be considered by the Soil Conservation Service as proper costs of the projects and such measures as are determined to be appropriate by the Soil Conservation Service shall be incorporated in the watershed work plan.

Tangible benefits or losses to such resources shall be appropriately credited or charged to the projects and intangible benefits and losses may be cited.

Watershed work plans should represent the program of local people. The Soil Conservation Service will participate in carrying out only those elements of the project, however, that are in accordance with the provisions of Public Law 566 and that it considers to be in keeping with the policies of the Department of Agriculture.

Procedures

4. The Fish and Wildlife Service may make a reconnaissance study of proposed or approved watershed projects to determine (1) the probable effects of the project on fish and wildlife resources, and (2) whether detailed studies of the watershed area and project plans are needed

properly to integrate measures for conservation of fish and wildlife into watershed work plans. These reconnaissance studies shall be financed from funds regularly appropriated to the Fish and Wildlife Service for River Basin Studies.

5. In the event detailed studies by the Fish and Wildlife Service of certain projects are recommended and both the need for and the estimated cost of making such studies have the concurrence of the Soil Conservation Service, the cost of such detailed studies will be financed by transfer of funds from the Soil Conservation Service.
6. Following the transfer of funds for these studies, the Fish and Wildlife Service shall proceed promptly to undertake them, in close consultation with the appropriate State fish and game agencies, the local offices of the Soil Conservation Service, and the representatives of the local organization. The Fish and Wildlife Service will keep in mind at all times the objectives of the local organization in the development of a watershed project.
7. The recommendations developed by these studies will be given full consideration by the Soil Conservation Service and will be presented for the consideration of the local organization in developing the watershed work plan.
8. This memorandum of understanding will be implemented by periodic agreement for transfer of funds and arrangements for specific work.

/s/ John L. Farley
Director, Fish and Wildlife Service

/s/ Gladwin Young, Acting
Administrator, Soil Conservation
Service

Date May 24, 1955

Date May 12, 1955

Wm

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